

PROOF OF THE CONTINUED FRACTION CONJECTURE FOR

$$(a, b) = (z^2 + 1, z^5 + z^2 + 1)$$

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ABSTRACT. The continued fraction conjecture claims that the continued fraction defined by the (a, b) -Thue-Morse sequence is algebraic over $\mathbb{F}_2(x)$ for all pairs of distinct elements (a, b) in $\mathbb{F}_2[x] \setminus \mathbb{F}_2$. In this paper we prove the conjecture for $(a, b) = (z^2 + 1, z^5 + z^2 + 1)$.

1. INTRODUCTION

Let $\mathbb{F}_2$ be the finite field of cardinality 2. Given a sequence of polynomials $\mathbf{a} = (a_0(z), a_1(z), a_2(z), \dots)$ of elements from $\mathbb{F}_2[z] \setminus \mathbb{F}_2$, we define the infinite continued fraction

$$(1.1) \quad \text{CF}(\mathbf{a}(z)) = \frac{1}{a_0(z) + \frac{1}{a_1(z) + \frac{1}{a_2(z) + \frac{1}{\ddots}}}}$$

as the limit of the finite continued fractions

$$(1.2) \quad \text{CF}_n(\mathbf{a}(z)) = \frac{1}{a_0(z) + \frac{1}{a_1(z) + \frac{1}{\ddots + \frac{1}{a_n(z)}}}} \in \mathbb{F}_2((1/z)).$$

Conversely, each power series in $\mathbb{F}_2[[1/z]]$ without constant term

$$(1.3) \quad c_{-1}z^{-1} + c_{-2}z^{-2} + c_{-3}z^{-3} + \dots$$

admits a continued fraction expansion of form (1.1).

Let a and b be two distinct elements from $\mathbb{F}_2[z] \setminus \mathbb{F}_2$. We consider the continued fraction (1.1) associated with the (a, b) -Thue-Morse sequence

$$\mathbf{t} = (t_0(z), t_1(z), t_2(z), \dots) = (a, b, b, a, b, a, a, b, \dots)$$

that we shall denote

$$(1.4) \quad \text{CF}(a, b) := \text{CF}(\mathbf{t}).$$

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Theorem 1.1. *When $(a, b) = (z^2 + 1, z^5 + z^2 + 1)$, the two power series $\text{CF}(a, b)$ and $\text{CF}(b, a)$ are algebraic over $\mathbb{F}_2(z)$, with minimal polynomials of the form*

$$p_4(z)y^4 + p_3(z)y^3 + p_2(z)y^2 + p_1(z)y + p_0(z) = 0$$

where, for $\text{CF}(a, b)$,

$$\begin{aligned} p_0(z) &= z^{21} + z^{20} + z^{19} + z^{18} + z^{15} + z^{13} + z^{12} + z^{10} + z^8 + z^7 + z^5 + z^4 + 1, \\ p_1(z) &= z^{26} + z^{24} + z^{23} + z^{20} + z^{19} + z^{18} + z^{17} + z^{13} + z^{12} + z^{10} + z^9 + z^5, \\ p_2(z) &= z^{28} + z^{24} + z^{18} + z^{16} + z^{10} + 1, \\ p_3(z) &= z^{26} + z^{24} + z^{23} + z^{20} + z^{19} + z^{18} + z^{17} + z^{13} + z^{12} + z^{10} + z^9 + z^5, \\ p_4(z) &= z^{24} + z^{21} + z^{20} + z^{19} + z^{15} + z^{13} + z^{12} + z^8 + z^7 + z^5 + z^4 + 1, \end{aligned}$$

and for $\text{CF}(b, a)$,

$$\begin{aligned} p_0(z) &= z^{21} + z^{19} + z^{18} + z^{15} + z^{13} + z^{12} + z^{10} + z^8 + z^7 + z^5 + z^4 + 1, \\ p_1(z) &= z^{26} + z^{24} + z^{23} + z^{20} + z^{19} + z^{18} + z^{17} + z^{13} + z^{12} + z^{10} + z^9 + z^5, \\ p_2(z) &= z^{28} + z^{24} + z^{18} + z^{16} + z^{10} + 1, \\ p_3(z) &= z^{26} + z^{24} + z^{23} + z^{20} + z^{19} + z^{18} + z^{17} + z^{13} + z^{12} + z^{10} + z^9 + z^5, \\ p_4(z) &= z^{24} + z^{21} + z^{19} + z^{15} + z^{13} + z^{12} + z^8 + z^7 + z^5 + z^4 + 1. \end{aligned}$$

2. PROOF

Define the sequences of polynomials $(P_n(z))_{n \geq 0}$ and $(Q_n(z))_{n \geq 0}$ by

$$\begin{pmatrix} P_n(z) & Q_n(z) \\ P_{n-1}(z) & Q_{n-1}(z) \end{pmatrix} := \begin{pmatrix} t_n(z) & 1 \\ 1 & 0 \end{pmatrix} \begin{pmatrix} t_{n-1}(z) & 1 \\ 1 & 0 \end{pmatrix} \cdots \begin{pmatrix} t_0(z) & 1 \\ 1 & 0 \end{pmatrix} \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}.$$

By the basic properties of continued fractions, we have

$$(2.1) \quad \text{CF}_n(a, b) = \frac{P_n(z)}{Q_n(z)} \in \mathbb{F}_2((1/z)).$$

As formula (2.1) is not efficient for calculating $\text{CF}_n(a, b)$, a fast method is to be derived and described as follows. Define

$$\begin{aligned} M_n(x) &= x^{\deg(t_{2^n-1})} \begin{pmatrix} t_{2^n-1}(1/x) & 1 \\ 1 & 0 \end{pmatrix} \times x^{\deg(t_{2^n-2})} \begin{pmatrix} t_{2^n-2}(1/x) & 1 \\ 1 & 0 \end{pmatrix} \times \\ &\quad \cdots \times x^{\deg(t_0)} \begin{pmatrix} t_0(1/x) & 1 \\ 1 & 0 \end{pmatrix}, \\ W_n(x) &= x^{\deg(\bar{t}_{2^n-1})} \begin{pmatrix} \bar{t}_{2^n-1}(1/x) & 1 \\ 1 & 0 \end{pmatrix} \times x^{\deg(\bar{t}_{2^n-2})} \begin{pmatrix} \bar{t}_{2^n-2}(1/x) & 1 \\ 1 & 0 \end{pmatrix} \times \\ &\quad \cdots \times x^{\deg(\bar{t}_0)} \begin{pmatrix} \bar{t}_0(1/x) & 1 \\ 1 & 0 \end{pmatrix}, \end{aligned}$$

where $\bar{t}$ is the (b, a) -Thue-Morse sequence. By the properties of the Thue-Morse sequence, we have for $n \geq 0$

$$\begin{aligned} M_{n+1}(x) &= W_n(x) \cdot M_n(x), \\ W_{n+1}(x) &= M_n(x) \cdot W_n(x). \end{aligned}$$

Let $x := 1/z$. For each non-zero polynomial $P(z)$, define $\tilde{P}(x)$ to be $P(1/x)$. Then,

$$\text{CF}_n(a, b) = \frac{P_n(z)}{Q_n(z)} = \frac{\tilde{P}_n(x)}{\tilde{Q}_n(x)} \in \mathbb{F}_2((x)) = \mathbb{F}_2((1/z)).$$

Comparing the definition of $M_n(x)$ with the definition of $P_n(x)$ and $Q_n(x)$, we see that

$$\begin{aligned} M_n(x)_{0,1} &= x^{d_n} \tilde{P}_{2^n-1}(x), \\ M_n(x)_{0,0} &= x^{d_n} \tilde{Q}_{2^n-1}(x), \end{aligned}$$

for some positive integer d_n . Hence,

$$(2.2) \quad \text{CF}_{2^{2^n}-1}(a, b) = \frac{\tilde{P}_{2^{2^n}-1}(x)}{\tilde{Q}_{2^{2^n}-1}(x)} = \frac{M_{2^n}(x)_{0,1}}{M_{2^n}(x)_{0,0}}.$$

Therefore, by the convergence theorem of continued fraction, the algebraicity of $\text{CF}(a, b)$ will be established if it is shown that both $M_{2^n}(x)_{0,1}$ and $M_{2^n}(x)_{0,0}$ converge to algebraic series in $\mathbb{F}_2[[x]]$.

Actually, we will prove that for all $0 \leq i, j \leq 1$ the four sequences $(M_{2^n}(x)_{i,j})_n$, $(M_{2^{n+1}}(x)_{i,j})_n$, $(W_{2^n}(x)_{i,j})_n$, and $(W_{2^{n+1}}(x)_{i,j})_n$ converge to algebraic series in $\mathbb{F}_2[[x]]$. For this purpose, we define four 2×2 matrices M^e, M^o, W^e, W^o as follows: For each $T \in \{M^e, M^o, W^e, W^o\}$ and $0 \leq i, j \leq 1$, $T_{i,j}$ is defined to be the unique solution in $\mathbb{F}_2[[x]]$ of the polynomial $\phi(T, i, j)$ under certain initial conditions; the polynomials $\phi(T, i, j)$ and initial conditions are given in Section 3. We will prove that these four matrices, whose components are algebraic by definition, are the limits of $(M_{2^n}(x))_n$, $(M_{2^{n+1}}(x))_n$, $(W_{2^n}(x))_n$, and $(W_{2^{n+1}}(x))_n$.

Let us explain how the polynomials $\phi(T, i, j)$ and initial conditions are found, and why the solutions exist and are unique. For $0 \leq i, j \leq 1$, the coefficients of the polynomial $\phi(M^e, i, j)$ (resp. $\phi(M^o, i, j)$, $\phi(W^e, i, j)$, and $\phi(W^o, i, j)$) are the Padé-Hermite approximants of type

$$(175, 175, 175, 175, 175)$$

of the vector

$$(1, T^3, T^6, T^9, T^{12}),$$

where $T = M_{12,i,j}$ (resp. $M_{11,i,j}$, $W_{12,i,j}$, and $W_{11,i,j}$), found by the Derksen algorithm. We take the first 8 terms of $M_{12,i,j}$ (resp. $M_{11,i,j}$, $W_{12,i,j}$, and $W_{11,i,j}$) as initial conditions for $\phi(M^e, i, j)$ (resp. $\phi(M^o, i, j)$, $\phi(W^e, i, j)$, and $\phi(W^o, i, j)$). The following fact will be used to ensure that the solution exists and is unique: let $P(x, y) \in \mathbb{F}_2[x, y]$ and for each series $f(x) = \sum_{n=0}^{\infty} a_n x^n \in \mathbb{F}_2[[x]]$ denote the partial sum $\sum_{j=0}^{n-1} a_j x^j$ by $f_n(x)$ for $n \geq 0$. If for some $n \geq 0$ and $a_0, a_1, \dots, a_{n-1} \in \mathbb{F}_2$ $P(x, \sum_{j=0}^{n-1} a_j x^j) = O(x^n)$ and $Q(x, y) := P(x, \sum_{j=0}^{n-1} a_j x^j + x^n y)$ can be written as $x^m \sum_{j=0}^{\infty} q_j(x) y^j$ where $q_j(x)$ are polynomials for $j \geq 0$, $q_1(0) = 1$, and $q_j(0) = 0$ for $j > 1$, then there exists a unique solution $f(x) \in \mathbb{F}_2[[x]]$ of $P(x, f(x)) = 0$ that satisfies the initial condition $f_n(x) = \sum_{j=0}^{n-1} a_j x^j$.

We state two lemmas concerning the four matrices M^e, M^o, W^e, W^o . The first one is about relations between them; the second, about the structure of the each matrix.

Lemma 2.1. *We have*

$$(2.3) \quad M^e = W^o \cdot M^o,$$

$$(2.4) \quad M^o = W^e \cdot M^e,$$

$$(2.5) \quad W^e = M^o \cdot W^o,$$

$$(2.6) \quad W^o = M^e \cdot W^e.$$

Proof. We give the proof of the identity

$$M_{0,0}^e = W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o,$$

the proofs of the others being similar.

First, we compute the minimal polynomials of $W_{0,0}^o M_{0,0}^o$ and $W_{0,1}^o M_{1,0}^o$. We know that

$$P(x, y) = \text{Res}_z (\phi(W^o, 0, 0)(x, z), z^{12} \cdot \phi(M^o, 0, 0)(x, y/z))$$

is an annihilating polynomial of $W_{0,0}^o M_{0,0}^o$. We use Padé-Hermite approximation to find a candidate for the minimal polynomial of $W_{0,0}^o M_{0,0}^o$, that will be called $\phi_0(x, y)$. To prove that $\phi_0(x, y)$ is indeed the minimal polynomial, it suffices to prove that it is an irreducible factor of $P(x, y)$ of multiplicity m and that $Q(x, y) := P(x, y)/\phi_0(x, y)^m$ is not an annihilating polynomial of $W_{0,0}^o M_{0,0}^o$. We verify the first point directly. For the second point, we truncate $W_{0,0}^o M_{0,0}^o$ to order 630 and substitute it for y in $Q(x, y)$. We get a series of valuation less than 630, which proves that $Q(x, y)$ is not an annihilating polynomial of $W_{0,0}^o M_{0,0}^o$. We find the minimal polynomial $\phi_1(x, y)$ of $W_{0,1}^o M_{1,0}^o$ in a similar way.

Now we prove that $\phi(M^e, 0, 0)$ is the minimal polynomial of $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$. We know that

$$S(x, y) = \text{Res}_z (\phi_0(x, z), \phi_1(x, y + z))$$

is an annihilating of $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$. We verify that $\phi(M^e, 0, 0)$ is an irreducible factor of $S(x, y)$ of multiplicity μ , and that $Q(x, y) := S(x, y)/\phi(M^e, 0, 0)^\mu$ is not an annihilating polynomial of $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$. To see the last point, we truncate $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$ to order 770 and substitute it for y in $Q(x, y)$. We get a series of valuation less than 770, and therefore $Q(x, y)$ is not an annihilating polynomial of $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$.

Finally, the first 16 terms of $M_{0,0}^e$ and $W_{0,0}^o M_{0,0}^o + W_{0,1}^o M_{1,0}^o$ coincide. As these first terms determine a unique solution of $\phi(M^e, 0, 0)$, we know that the two series are one and the same. $\square$

Define

$$R^e = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix} \quad \text{and} \quad R^o = \begin{pmatrix} 0 & 1 \\ 1 & 1 \end{pmatrix}.$$

Lemma 2.2. *For all integers $k \geq 2$ and $u = 2^{2k-1}$, the following identities hold.*

$$\begin{aligned} M^e[:14u] &= M^e[:7u] + x^{2u} M^e[:5u] + x^{3u} M^e[:4u] + x^{4u} M^e[:3u] + x^{6u} M^e[:u] \\ &\quad + x^{2u} M^e[:7u] + x^{4u} M^e[:5u] + x^{5u} M^e[:4u] + x^{6u} M^e[:3u] \\ &\quad + x^{8u} M^e[:u] + x^{3u} M^e[:7u] + x^{5u} M^e[:5u] + x^{6u} M^e[:4u] \\ &\quad + x^{7u} M^e[:3u] + x^{9u} M^e[:u] + x^{6u} M^e[:7u] + x^{8u} M^e[:5u] \\ &\quad + x^{9u} M^e[:4u] + x^{10u} M^e[:3u] + x^{12u} M^e[:u] + x^{7u} M^e[:7u] \\ &\quad + x^{11u} M^e[:3u] + x^{12u} M^e[:2u] + x^{13u} M^e[:u] \end{aligned}$$

$$\begin{aligned}
& + (x^{7u} + x^{9u} + x^{10u} + x^{13u})R^e, \\
W^e[:14u] &= W^e[:7u] + x^{2u}W^e[:5u] + x^{3u}W^e[:4u] + x^{4u}W^e[:3u] + x^{6u}W^e[:u] \\
& + x^{2u}W^e[:7u] + x^{4u}W^e[:5u] + x^{5u}W^e[:4u] + x^{6u}W^e[:3u] \\
& + x^{8u}W^e[:u] + x^{3u}W^e[:7u] + x^{5u}W^e[:5u] + x^{6u}W^e[:4u] \\
& + x^{7u}W^e[:3u] + x^{9u}W^e[:u] + x^{6u}W^e[:7u] + x^{8u}W^e[:5u] \\
& + x^{9u}W^e[:4u] + x^{10u}W^e[:3u] + x^{12u}W^e[:u] + x^{7u}W^e[:7u] \\
& + x^{11u}W^e[:3u] + x^{12u}W^e[:2u] + x^{13u}W^e[:u] \\
& + (x^{7u} + x^{9u} + x^{10u} + x^{13u})R^e.
\end{aligned}$$

For all integers $k \geq 2$ and $u = 2^{2k}$, the following identities hold.

$$\begin{aligned}
M^o[:14u] &= M^o[:7u] + x^{2u}M^o[:5u] + x^{3u}M^o[:4u] + x^{4u}M^o[:3u] + x^{6u}M^o[:u] \\
& + x^{2u}M^o[:7u] + x^{4u}M^o[:5u] + x^{5u}M^o[:4u] + x^{6u}M^o[:3u] \\
& + x^{8u}M^o[:u] + x^{3u}M^o[:7u] + x^{5u}M^o[:5u] + x^{6u}M^o[:4u] \\
& + x^{7u}M^o[:3u] + x^{9u}M^o[:u] + x^{6u}M^o[:7u] + x^{8u}M^o[:5u] \\
& + x^{9u}M^o[:4u] + x^{10u}M^o[:3u] + x^{12u}M^o[:u] + x^{7u}M^o[:7u] \\
& + x^{11u}M^o[:3u] + x^{12u}M^o[:2u] + x^{13u}M^o[:u] \\
& + (x^{7u} + x^{9u} + x^{10u} + x^{13u})R^o, \\
W^o[:14u] &= W^o[:7u] + x^{2u}W^o[:5u] + x^{3u}W^o[:4u] + x^{4u}W^o[:3u] + x^{6u}W^o[:u] \\
& + x^{2u}W^o[:7u] + x^{4u}W^o[:5u] + x^{5u}W^o[:4u] + x^{6u}W^o[:3u] \\
& + x^{8u}W^o[:u] + x^{3u}W^o[:7u] + x^{5u}W^o[:5u] + x^{6u}W^o[:4u] \\
& + x^{7u}W^o[:3u] + x^{9u}W^o[:u] + x^{6u}W^o[:7u] + x^{8u}W^o[:5u] \\
& + x^{9u}W^o[:4u] + x^{10u}W^o[:3u] + x^{12u}W^o[:u] + x^{7u}W^o[:7u] \\
& + x^{11u}W^o[:3u] + x^{12u}W^o[:2u] + x^{13u}W^o[:u] \\
& + (x^{7u} + x^{9u} + x^{10u} + x^{13u})R^o.
\end{aligned}$$

Proof. To prove Lemma 2.2 we first construct an automaton for each sequence concerned, and then transform the conditions on infinitely many k 's into finitely many conditions on the states of the automaton. In the following, we will prove that for $T = M_{0,0}^o$, for all integer $k \geq 2$ and $u = 2^{2k}$,

$$\begin{aligned}
T[:14u] &= T[:7u] + x^{2u}T[:5u] + x^{3u}T[:4u] + x^{4u}T[:3u] + x^{6u}T[:u] + x^{2u}T[:7u] \\
& + x^{4u}T[:5u] + x^{5u}T[:4u] + x^{6u}T[:3u] + x^{8u}T[:u] + x^{3u}T[:7u] \\
& + x^{5u}T[:5u] + x^{6u}T[:4u] + x^{7u}T[:3u] + x^{9u}T[:u] + x^{6u}T[:7u] \\
& + x^{8u}T[:5u] + x^{9u}T[:4u] + x^{10u}T[:3u] + x^{12u}T[:u] + x^{7u}T[:7u] \\
& + x^{11u}T[:3u] + x^{12u}T[:2u] + x^{13u}T[:u] \\
& + (x^{7u} + x^{9u} + x^{10u} + x^{13u}).
\end{aligned}$$

The proof of the other 15 cases are similar. We break down the above identity into 7 parts:

$$x^{7u} = x^{6u}T[u:2u] + x^{4u}T[3u:4u] + x^{3u}T[4u:5u] + x^{2u}T[5u:6u]$$

$$\begin{aligned}
& + T[7u:8u], \\
0 & = x^{6u}T[2u:3u] + x^{4u}T[4u:5u] + x^{3u}T[5u:6u] + x^{2u}T[6u:7u] \\
& + T[8u:9u], \\
x^9u & = x^{8u}T[u:2u] + x^{5u}T[4u:5u] + x^{3u}T[6u:7u] + T[9u:10u], \\
x^10u & = x^{10u}T[:u] + x^{9u}T[u:2u] + x^{8u}T[2u:3u] + x^{7u}T[3u:4u] \\
& + x^{6u}T[4u:5u] + T[10u:11u], \\
0 & = x^{11u}T[:u] + x^{10u}T[u:2u] + x^{9u}T[2u:3u] + x^{8u}T[3u:4u] \\
& + x^{7u}T[4u:5u] + x^{6u}T[5u:6u] + T[11u:12u], \\
0 & = x^{11u}T[u:2u] + x^{10u}T[2u:3u] + x^{9u}T[3u:4u] + x^{8u}T[4u:5u] \\
& + x^{7u}T[5u:6u] + x^{6u}T[6u:7u] + T[12u:13u], \\
x^13u & = x^{13u}T[:u] + x^{12u}T[u:2u] + x^{11u}T[2u:3u] + x^{7u}T[6u:7u] \\
& + T[13u:14u],
\end{aligned}$$

which can be rewritten as

$$\begin{aligned}
(2.7) \quad 0 & = T[[1w]_2] + T[[11w]_2] + T[[100w]_2] + T[[101w]_2] + T[[111w]_2], \\
(2.8) \quad 0 & = T[[10w]_2] + T[[100w]_2] + T[[101w]_2] + T[[110w]_2] + T[[1000w]_2], \\
(2.9) \quad 0 & = T[[1w]_2] + T[[100w]_2] + T[[110w]_2] + T[[1001w]_2], \\
& 0 = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] \\
(2.10) \quad & + T[[1010w]_2], \\
& 0 = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] \\
(2.11) \quad & + T[[101w]_2] + T[[1011w]_2], \\
& 0 = T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] + T[[101w]_2] \\
(2.12) \quad & + T[[110w]_2] + T[[1100w]_2], \\
(2.13) \quad 0 & = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[110w]_2] + T[[1101w]_2],
\end{aligned}$$

for all binary word w of length $2k$ and $w \neq 0^{2k}$, and

$$\begin{aligned}
(2.14) \quad 1 & = T[[1w]_2] + T[[11w]_2] + T[[100w]_2] + T[[101w]_2] + T[[111w]_2], \\
(2.15) \quad 0 & = T[[10w]_2] + T[[100w]_2] + T[[101w]_2] + T[[110w]_2] + T[[1000w]_2], \\
(2.16) \quad 1 & = T[[1w]_2] + T[[100w]_2] + T[[110w]_2] + T[[1001w]_2], \\
& 1 = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] \\
(2.17) \quad & + T[[1010w]_2], \\
& 0 = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] \\
(2.18) \quad & + T[[101w]_2] + T[[1011w]_2], \\
& 0 = T[[1w]_2] + T[[10w]_2] + T[[11w]_2] + T[[100w]_2] + T[[101w]_2] \\
(2.19) \quad & + T[[110w]_2] + T[[1100w]_2], \\
(2.20) \quad 1 & = T[[w]_2] + T[[1w]_2] + T[[10w]_2] + T[[110w]_2] + T[[1101w]_2],
\end{aligned}$$

for $w = 0^{2k}$.

First we calculate an 2-automaton that generates T from its minimal polynomial and its first terms. This automaton has 7704 states; its transition function and

output function can be found in the annex. Let $A(s, w)$ denote the state reached after reading w from right to left starting from the state s , and τ the output function. Define

$$E_{2k} = \{A(i, w) : |w| = 2k, w \neq 0^{2k}\}.$$

Identities (2.7) through (2.20) can be written as

$$\begin{aligned}
(2.21) \quad & 0 = \tau(A(s, 1)) + \tau(A(s, 11)) + \tau(A(s, 100)) + \tau(A(s, 101)) \\
& \quad + \tau(A(s, 111)), \\
(2.22) \quad & 0 = \tau(A(s, 10)) + \tau(A(s, 100)) + \tau(A(s, 101)) + \tau(A(s, 110)) \\
& \quad + \tau(A(s, 1000)), \\
(2.23) \quad & 0 = \tau(A(s, 1)) + \tau(A(s, 100)) + \tau(A(s, 110)) + \tau(A(s, 1001)), \\
& 0 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
(2.24) \quad & \quad + \tau(A(s, 1010)), \\
(2.25) \quad & 0 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
& \quad + \tau(A(s, 101)) + \tau(A(s, 1011)), \\
(2.26) \quad & 0 = \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
& \quad + \tau(A(s, 101)) + \tau(A(s, 110)) + \tau(A(s, 1100)), \\
(2.27) \quad & 0 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 110)) \\
& \quad + \tau(A(s, 1101)),
\end{aligned}$$

for all $s \in E_{2k}$, and

$$\begin{aligned}
(2.28) \quad & 1 = \tau(A(s, 1)) + \tau(A(s, 11)) + \tau(A(s, 100)) + \tau(A(s, 101)) \\
& \quad + \tau(A(s, 111)), \\
(2.29) \quad & 0 = \tau(A(s, 10)) + \tau(A(s, 100)) + \tau(A(s, 101)) + \tau(A(s, 110)) \\
& \quad + \tau(A(s, 1000)), \\
(2.30) \quad & 1 = \tau(A(s, 1)) + \tau(A(s, 100)) + \tau(A(s, 110)) + \tau(A(s, 1001)), \\
(2.31) \quad & 1 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
& \quad + \tau(A(s, 1010)), \\
(2.32) \quad & 0 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
& \quad + \tau(A(s, 101)) + \tau(A(s, 1011)), \\
(2.33) \quad & 0 = \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 11)) + \tau(A(s, 100)) \\
& \quad + \tau(A(s, 101)) + \tau(A(s, 110)) + \tau(A(s, 1100)), \\
(2.34) \quad & 1 = \tau(A(s, \epsilon)) + \tau(A(s, 1)) + \tau(A(s, 10)) + \tau(A(s, 110)) \\
& \quad + \tau(A(s, 1101)),
\end{aligned}$$

for $s = A(i, 0^{2k})$. We find that $(A(i, 0^{50}), E_{50}) = (A(i, 0^{22}), E_{22})$, so that we only have to verify that identities (2.21) through (2.34) hold for $2 \leq k \leq 25$, which turns out to be true. $\square$

In the following lemma, we express M_{2k} , M_{2k+1} , W_{2k} , and W_{2k+1} in terms of M^e , M^o , W^e , and W^o .

Lemma 2.3. *For all integer $k \geq 2$, and $u = 2^{2k-1}$,*

$$\begin{aligned} M_{2k} &= M^e[:7u] + x^{2u}M^e[:5u] + x^{3u}M^e[:4u] + x^{4u}M^e[:3u] + x^{6u}M^e[:u] \\ &\quad + x^{7u}R^e, \\ W_{2k} &= W^e[:7u] + x^{2u}W^e[:5u] + x^{3u}W^e[:4u] + x^{4u}W^e[:3u] + x^{6u}W^e[:u] \\ &\quad + x^{7u}R^e. \end{aligned}$$

For all integer $k \geq 2$, and $u = 2^{2k}$,

$$\begin{aligned} M_{2k+1} &= M^o[:7u] + x^{2u}M^o[:5u] + x^{3u}M^o[:4u] + x^{4u}M^o[:3u] + x^{6u}M^o[:u] \\ &\quad + x^{7u}R^o, \\ W_{2k+1} &= W^o[:7u] + x^{2u}W^o[:5u] + x^{3u}W^o[:4u] + x^{4u}W^o[:3u] + x^{6u}W^o[:u] \\ &\quad + x^{7u}R^o. \end{aligned}$$

Proof. We call the four identities in Lemma 2.3 also by the name M_{2k} , W_{2k} , M_{2k+1} , and W_{2k+1} . For $n = 2$, the identities can be verified directly. For $n \geq 2$, we claim that

$$\begin{aligned} M_{2k} \wedge W_{2k} &\Rightarrow M_{2k+1} \wedge W_{2k+1}, \\ M_{2k+1} \wedge W_{2k+1} &\Rightarrow M_{2k+2} \wedge W_{2k+2}. \end{aligned}$$

We give the proof of

$$M_{2k} \wedge W_{2k} \Rightarrow M_{2k+1},$$

the other ones being similar. Set $u = 2^{2k}$ and $v = 2^{2k-1}$. By definition and induction hypothesis, the left side of identity M_{2k+1} is equal to

$$\begin{aligned} (2.35) \quad W_{2k}M_{2k} &= (W^e[:7v] + x^{2v}W^e[:5v] + x^{3v}W^e[:4v] + x^{4v}W^e[:3v] + x^{6v}W^e[:v] \\ &\quad + x^{7v}R^e) \times (M^e[:7v] + x^{2v}M^e[:5v] + x^{3v}M^e[:4v] + x^{4v}M^e[:3v] \\ &\quad + x^{6v}M^e[:v] + x^{7v}R^e); \end{aligned}$$

Call this expression *lhs*. Note that both sides of identity M_{2k+1} have the same term of highest degree $x^{14v}R^o$. Therefore we only need to prove that their difference is $O(x^{14v})$. Using Lemma 2.1 it can be seen that the right side of identity M_{2k+1} is congruent, modulo x^{14v} , to

$$\begin{aligned} W^e[:14v]M^e[:14v] &+ x^{4v}W^e[:10v]M^e[:10v] + x^{6v}W^e[:8v]M^e[:8v] \\ &+ x^{8v}W^e[:6v]M^e[:6v] + x^{12v}W^e[:2v]M^e[:2v]. \end{aligned}$$

For all $n \leq 14$, replace the occurrences of $W^e[:n \cdot v]$ and $M^e[:n \cdot v]$ in the above expression by the reduction modulo $x^{n \cdot v}$ of the right side of the corresponding identity in Lemma 2.2 and get a new expression, which we call *rhs*. Define

$$\begin{aligned} X &:= x^v, \\ a_n &:= W^e[n \cdot v : (n+1) \cdot v] / X^n, \\ b_n &:= M^e[n \cdot v : (n+1) \cdot v] / X^n, \\ c &:= R^e. \end{aligned}$$

Using the notation introduced above, we can represent the expressions *lhs* (2.35) and *rhs* as polynomials in $\mathbb{F}_2[a_1, \dots, a_{14}, b_1, \dots, b_{14}, c][X]$. Note that it is not a problem that a_j commutes with b_k while W^e does not commute with M^e , because in the expressions concerned, the products of W^e -terms and M^e -terms are always in the

same order. We let the computer do the simplification and check that the difference between these two polynomials is indeed $O(X^{14})$, which completes the proof. $\square$

Proof of Theorem 1.1. We prove the theorem for $\text{CF}(a, b)$; for $\text{CF}(b, a)$, the proof is similar. By Lemma 2.3, we have For all $0 \leq j, k \leq 1$,

$$\begin{aligned}\lim_{n \rightarrow \infty} M_{2n,j,k} &= M_{j,k}^e, \\ \lim_{n \rightarrow \infty} M_{2n+1,j,k} &= M_{j,k}^o, \\ \lim_{n \rightarrow \infty} W_{2n,j,k} &= W_{j,k}^e, \\ \lim_{n \rightarrow \infty} W_{2n+1,j,k} &= W_{j,k}^o.\end{aligned}$$

Let $z = 1/x$. By the convergence theorem and identity (2.2),

$$\text{CF}(a, b) = \frac{M_{0,1}^e(x)}{M_{0,0}^e(x)}.$$

By definition, $\phi(M^e, 0, 1)$ and $\phi(M^e, 0, 0)$ are minimal polynomials of $M_{0,1}^e$ and $M_{0,0}^e$. Therefore

$$P(x, y) = \text{Res}_t (\phi(M^e, 0, 1)(x, t), y^{12} \phi(M^e, 0, 1)(x, t/y))$$

is an annihilating polynomial of $f(x) = M_{0,1}^e/M_{0,0}^e$.

Define

$$Q(x, y) = q_4(x)y^4 + q_3(x)y^3 + q_2(x)y^2 + q_1(x)y + q_0(x),$$

where

$$\begin{aligned}q_0(x) &= x^{28} + x^{24} + x^{23} + x^{21} + x^{20} + x^{18} + x^{16} + x^{15} + x^{13} + x^{10} + x^9 + x^8 \\ &\quad + x^7, \\ q_1(x) &= x^{23} + x^{19} + x^{18} + x^{16} + x^{15} + x^{11} + x^{10} + x^9 + x^8 + x^5 + x^4 + x^2, \\ q_2(x) &= x^{28} + x^{18} + x^{12} + x^{10} + x^4 + 1, \\ q_3(x) &= x^{23} + x^{19} + x^{18} + x^{16} + x^{15} + x^{11} + x^{10} + x^9 + x^8 + x^5 + x^4 + x^2, \\ q_4(x) &= x^{28} + x^{24} + x^{23} + x^{21} + x^{20} + x^{16} + x^{15} + x^{13} + x^9 + x^8 + x^7 + x^4.\end{aligned}$$

The polynomial $Q(x, y)$ is the candidate for the minimal polynomial of $f(x)$ found by Padé-Hermite approximation. To prove that it is indeed the minimal polynomial of $f(x)$, we only need to prove that it is an irreducible factor of $P(x, y)$ of multiplicity m and $R(x, y) := P(x, y)/Q(x, y)^m$ is not an annihilating polynomial of $f(x)$. We verify the first point directly. For the second point, we find that when we truncate $f(x)$ to order 216, and substitute it for y in $R(z, y)$, we get a series with valuation smaller than 216, which proves that $R(z, y)$ is not an annihilating polynomial of $f(x)$. Finally, $z^{12}Q(1/z, y)$ is the minimal polynomial of $\text{CF}(a, b) = f(1/z)$. $\square$

3. ANNEXE

All 16 polynomials are of the form

$$p_0(x) + p_3(x)y^3 + p_6(x)y^6 + p_9(x)y^9 + p_{12}(x)y^{12}.$$

The coefficients $p_j(x)$ and the 16 initial terms to determine the solutions uniquely are given below.

For $\phi(M^e, 0, 0)$:

$$\begin{aligned}
p_0(x) &= x^{156} + x^{152} + x^{148} + x^{146} + x^{144} + x^{140} + x^{138} + x^{130} + x^{128} + x^{126} \\
&\quad + x^{124} + x^{122} + x^{118} + x^{116} + x^{114} + x^{106} + x^{104} + x^{94} + x^{92} + x^{90} \\
&\quad + x^{88} + x^{86} + x^{76} + x^{70} + x^{68} + x^{64} + x^{60} + x^{58} + x^{56} + x^{54} + x^{52} \\
&\quad + x^{50} + x^{48} + x^{40} + x^{38} + x^{32} + x^{30} + x^{28} + x^{24}, \\
p_3(x) &= x^{146} + x^{142} + x^{126} + x^{122} + x^{118} + x^{114} + x^{112} + x^{110} + x^{106} + x^{102} \\
&\quad + x^{90} + x^{88} + x^{86} + x^{80} + x^{78} + x^{76} + x^{72} + x^{66} + x^{58} + x^{54} + x^{50} \\
&\quad + x^{44} + x^{42} + x^{40} + x^{38} + x^{34} + x^{32} + x^{30} + x^{22} + x^{20} + x^{18} + x^{16}, \\
p_6(x) &= x^{148} + x^{146} + x^{144} + x^{140} + x^{134} + x^{128} + x^{116} + x^{114} + x^{112} + x^{106} \\
&\quad + x^{102} + x^{96} + x^{92} + x^{90} + x^{88} + x^{86} + x^{82} + x^{80} + x^{76} + x^{72} + x^{68} \\
&\quad + x^{66} + x^{64} + x^{56} + x^{54} + x^{48} + x^{46} + x^{42} + x^{36} + x^{34} + x^{32} + x^{30} \\
&\quad + x^{28} + x^{26} + x^{22} + x^{18} + x^{12} + x^{10} + x^8 + 1, \\
p_9(x) &= x^{146} + x^{142} + x^{138} + x^{134} + x^{132} + x^{128} + x^{118} + x^{114} + x^{110} + x^{104} \\
&\quad + x^{100} + x^{92} + x^{90} + x^{86} + x^{84} + x^{78} + x^{72} + x^{66} + x^{62} + x^{54} + x^{52} \\
&\quad + x^{48} + x^{46} + x^{44} + x^{42} + x^{38} + x^{36} + x^{34} + x^{32} + x^{30} + x^{26} + x^{20} \\
&\quad + x^{18} + x^{16} + x^{14} + x^{10} + x^8 + x^4, \\
p_{12}(x) &= x^{156} + x^{152} + x^{140} + x^{136} + x^{116} + x^{112} + x^{92} + x^{88} + x^{76} + x^{72} \\
&\quad + x^{52} + x^{48} + x^{44} + x^{40} + x^{28} + x^{24} + x^4 + 1,
\end{aligned}$$

and the initial terms are $[1, 0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 0, 0, 0, 1, 0]$.

For $\phi(M^e, 0, 1)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{135} + x^{134} + x^{131} + x^{130} + x^{128} \\
&\quad + x^{127} + x^{124} + x^{122} + x^{120} + x^{119} + x^{116} + x^{115} + x^{112} + x^{111} \\
&\quad + x^{109} + x^{108} + x^{107} + x^{106} + x^{104} + x^{102} + x^{101} + x^{97} + x^{96} + x^{93} \\
&\quad + x^{89} + x^{88} + x^{83} + x^{80} + x^{77} + x^{76} + x^{75} + x^{74} + x^{70} + x^{68} + x^{65} \\
&\quad + x^{64} + x^{63} + x^{60} + x^{58} + x^{54} + x^{53} + x^{52} + x^{51} + x^{49} + x^{47} + x^{45} \\
&\quad + x^{42} + x^{41} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33}, \\
p_3(x) &= x^{102} + x^{92} + x^{86} + x^{84} + x^{78} + x^{74} + x^{70} + x^{60} + x^{54} + x^{52} + x^{42} \\
&\quad + x^{36} + x^{30} + x^{28} + x^{22} + x^{18}, \\
p_6(x) &= x^{117} + x^{113} + x^{112} + x^{110} + x^{109} + x^{107} + x^{105} + x^{104} + x^{101} + x^{100} \\
&\quad + x^{99} + x^{98} + x^{97} + x^{94} + x^{93} + x^{91} + x^{88} + x^{83} + x^{79} + x^{78} + x^{76} \\
&\quad + x^{75} + x^{73} + x^{71} + x^{70} + x^{69} + x^{67} + x^{66} + x^{65} + x^{62} + x^{59} + x^{57} \\
&\quad + x^{54} + x^{47} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{37} + x^{36} + x^{35} + x^{32} \\
&\quad + x^{29} + x^{27} + x^{25} + x^{24} + x^{23} + x^{21} + x^{20} + x^{16} + x^{15} + x^{14} + x^{12}, \\
p_9(x) &= x^{132} + x^{124} + x^{118} + x^{112} + x^{104} + x^{98} + x^{96} + x^{88} + x^{84} + x^{82} + x^{80} \\
&\quad + x^{76} + x^{72} + x^{70} + x^{68} + x^{66} + x^{64} + x^{60} + x^{54} + x^{52} + x^{50} + x^{48}
\end{aligned}$$

$$\begin{aligned}
& + x^{44} + x^{42} + x^{40} + x^{38} + x^{32} + x^{28} + x^{26} + x^{14} + x^{12} + x^6, \\
p_{12}(x) = & x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{126} + x^{124} + x^{123} + x^{122} + x^{120} \\
& + x^{119} + x^{115} + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{62} \\
& + x^{60} + x^{59} + x^{58} + x^{56} + x^{55} + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} \\
& + x^{28} + x^{19} + x^{14} + x^{12} + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 1, 0, 1, 0, 1, 0, 1, 1, 0, 0, 0, 1, 0, 1]$.

For $\phi(M^e, 1, 0)$:

$$\begin{aligned}
p_0(x) = & x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{135} + x^{134} + x^{131} + x^{130} + x^{128} \\
& + x^{127} + x^{124} + x^{122} + x^{120} + x^{119} + x^{116} + x^{115} + x^{112} + x^{111} \\
& + x^{109} + x^{108} + x^{107} + x^{106} + x^{104} + x^{102} + x^{101} + x^{97} + x^{96} + x^{93} \\
& + x^{89} + x^{88} + x^{83} + x^{80} + x^{77} + x^{76} + x^{75} + x^{74} + x^{70} + x^{68} + x^{65} \\
& + x^{64} + x^{63} + x^{60} + x^{58} + x^{54} + x^{53} + x^{52} + x^{51} + x^{49} + x^{47} + x^{45} \\
& + x^{42} + x^{41} + x^{38} + x^{37} + x^{36} + x^{35} + x^{34} + x^{33}, \\
p_3(x) = & x^{102} + x^{92} + x^{86} + x^{84} + x^{78} + x^{74} + x^{70} + x^{60} + x^{54} + x^{52} + x^{42} \\
& + x^{36} + x^{30} + x^{28} + x^{22} + x^{18}, \\
p_6(x) = & x^{117} + x^{113} + x^{112} + x^{110} + x^{109} + x^{107} + x^{105} + x^{104} + x^{101} + x^{100} \\
& + x^{99} + x^{98} + x^{97} + x^{94} + x^{93} + x^{91} + x^{88} + x^{83} + x^{79} + x^{78} + x^{76} \\
& + x^{75} + x^{73} + x^{71} + x^{70} + x^{69} + x^{67} + x^{66} + x^{65} + x^{62} + x^{59} + x^{57} \\
& + x^{54} + x^{47} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{37} + x^{36} + x^{35} + x^{32} \\
& + x^{29} + x^{27} + x^{25} + x^{24} + x^{23} + x^{21} + x^{20} + x^{16} + x^{15} + x^{14} + x^{12}, \\
p_9(x) = & x^{132} + x^{124} + x^{118} + x^{112} + x^{104} + x^{98} + x^{96} + x^{88} + x^{84} + x^{82} + x^{80} \\
& + x^{76} + x^{72} + x^{70} + x^{68} + x^{66} + x^{64} + x^{60} + x^{54} + x^{52} + x^{50} + x^{48} \\
& + x^{44} + x^{42} + x^{40} + x^{38} + x^{32} + x^{28} + x^{26} + x^{14} + x^{12} + x^6, \\
p_{12}(x) = & x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{126} + x^{124} + x^{123} + x^{122} + x^{120} \\
& + x^{119} + x^{115} + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{62} \\
& + x^{60} + x^{59} + x^{58} + x^{56} + x^{55} + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} \\
& + x^{28} + x^{19} + x^{14} + x^{12} + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 1, 0, 1, 0, 1, 0, 1, 1, 0, 0, 0, 1, 0, 1]$.

For $\phi(M^e, 1, 1)$:

$$\begin{aligned}
p_0(x) = & x^{138} + x^{134} + x^{130} + x^{126} + x^{122} + x^{110} + x^{108} + x^{106} + x^{100} + x^{98} \\
& + x^{86} + x^{78} + x^{76} + x^{70} + x^{60} + x^{58} + x^{52} + x^{50} + x^{48} + x^{44} + x^{42}, \\
p_3(x) = & x^{128} + x^{124} + x^{118} + x^{98} + x^{94} + x^{90} + x^{88} + x^{82} + x^{80} + x^{78} + x^{76} \\
& + x^{74} + x^{72} + x^{66} + x^{64} + x^{60} + x^{58} + x^{56} + x^{54} + x^{50} + x^{48} + x^{46} \\
& + x^{44} + x^{40} + x^{38} + x^{34} + x^{32} + x^{30} + x^{26} + x^{24} + x^{22} + x^{20} + x^{18} \\
& + x^{12},
\end{aligned}$$

$$\begin{aligned}
p_6(x) &= x^{130} + x^{128} + x^{126} + x^{122} + x^{120} + x^{116} + x^{112} + x^{108} + x^{100} + x^{98} \\
&\quad + x^{94} + x^{92} + x^{86} + x^{76} + x^{74} + x^{72} + x^{68} + x^{64} + x^{62} + x^{60} + x^{58} \\
&\quad + x^{56} + x^{54} + x^{48} + x^{44} + x^{40} + x^{38} + x^{36} + x^{14} + x^{10} + x^8 + x^6 + x^4 \\
&\quad + 1, \\
p_9(x) &= x^{128} + x^{124} + x^{120} + x^{118} + x^{116} + x^{114} + x^{104} + x^{100} + x^{96} + x^{92} \\
&\quad + x^{90} + x^{88} + x^{86} + x^{84} + x^{80} + x^{74} + x^{70} + x^{64} + x^{62} + x^{50} + x^{44} \\
&\quad + x^{42} + x^{38} + x^{34} + x^{28} + x^{26} + x^{24} + x^{18} + x^{14} + x^4, \\
p_{12}(x) &= x^{138} + x^{134} + x^{128} + x^{122} + x^{118} + x^{112} + x^{74} + x^{70} + x^{64} + x^{58} \\
&\quad + x^{54} + x^{48} + x^{26} + x^{22} + x^{16} + x^{10} + x^6 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 1, 0, 0, 0, 1, 0, 0, 0, 0, 1, 0]$.

For $\phi(W^e, 0, 0)$:

$$\begin{aligned}
p_0(x) &= x^{138} + x^{134} + x^{130} + x^{126} + x^{122} + x^{118} + x^{114} + x^{110} + x^{106} + x^{102} \\
&\quad + x^{100} + x^{98} + x^{94} + x^{92} + x^{90} + x^{86} + x^{82} + x^{78} + x^{68} + x^{62} + x^{60} \\
&\quad + x^{58} + x^{46} + x^{42} + x^{24}, \\
p_3(x) &= x^{128} + x^{124} + x^{118} + x^{108} + x^{104} + x^{100} + x^{98} + x^{96} + x^{94} + x^{92} \\
&\quad + x^{90} + x^{88} + x^{82} + x^{78} + x^{74} + x^{72} + x^{66} + x^{58} + x^{56} + x^{54} + x^{52} \\
&\quad + x^{50} + x^{48} + x^{46} + x^{40} + x^{38} + x^{34} + x^{32} + x^{30} + x^{26} + x^{22} + x^{20} \\
&\quad + x^{18} + x^{16}, \\
p_6(x) &= x^{130} + x^{128} + x^{126} + x^{122} + x^{120} + x^{118} + x^{116} + x^{114} + x^{112} + x^{108} \\
&\quad + x^{104} + x^{96} + x^{90} + x^{88} + x^{82} + x^{78} + x^{70} + x^{68} + x^{66} + x^{64} + x^{62} \\
&\quad + x^{58} + x^{54} + x^{46} + x^{44} + x^{38} + x^{36} + x^{34} + x^{22} + x^{20} + x^{18} + x^{12} \\
&\quad + x^{10} + x^6 + x^4 + 1, \\
p_9(x) &= x^{128} + x^{124} + x^{120} + x^{118} + x^{116} + x^{114} + x^{104} + x^{100} + x^{96} + x^{92} \\
&\quad + x^{90} + x^{88} + x^{86} + x^{84} + x^{80} + x^{74} + x^{70} + x^{64} + x^{62} + x^{50} + x^{44} \\
&\quad + x^{42} + x^{38} + x^{34} + x^{28} + x^{26} + x^{24} + x^{18} + x^{14} + x^4, \\
p_{12}(x) &= x^{138} + x^{134} + x^{128} + x^{122} + x^{118} + x^{112} + x^{74} + x^{70} + x^{64} + x^{58} \\
&\quad + x^{54} + x^{48} + x^{26} + x^{22} + x^{16} + x^{10} + x^6 + 1,
\end{aligned}$$

and the initial terms are $[1, 0, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0]$.

For $\phi(W^e, 0, 1)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{135} + x^{134} + x^{131} + x^{130} + x^{128} \\
&\quad + x^{127} + x^{124} + x^{122} + x^{120} + x^{119} + x^{117} + x^{116} + x^{115} + x^{113} \\
&\quad + x^{111} + x^{110} + x^{108} + x^{106} + x^{105} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} \\
&\quad + x^{92} + x^{90} + x^{89} + x^{88} + x^{87} + x^{85} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} \\
&\quad + x^{76} + x^{75} + x^{73} + x^{72} + x^{71} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{62} \\
&\quad + x^{61} + x^{57} + x^{56} + x^{52} + x^{49} + x^{45} + x^{44} + x^{43} + x^{40} + x^{38} + x^{36}
\end{aligned}$$

$$\begin{aligned}
& + x^{33}, \\
p_3(x) &= x^{102} + x^{92} + x^{86} + x^{84} + x^{78} + x^{74} + x^{70} + x^{60} + x^{54} + x^{52} + x^{42} \\
& + x^{36} + x^{30} + x^{28} + x^{22} + x^{18}, \\
p_6(x) &= x^{117} + x^{113} + x^{112} + x^{110} + x^{109} + x^{107} + x^{105} + x^{104} + x^{101} + x^{100} \\
& + x^{99} + x^{98} + x^{97} + x^{94} + x^{93} + x^{91} + x^{88} + x^{83} + x^{79} + x^{78} + x^{76} \\
& + x^{75} + x^{73} + x^{71} + x^{70} + x^{69} + x^{67} + x^{66} + x^{65} + x^{62} + x^{59} + x^{57} \\
& + x^{54} + x^{47} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{37} + x^{36} + x^{35} + x^{32} \\
& + x^{29} + x^{27} + x^{25} + x^{24} + x^{23} + x^{21} + x^{20} + x^{16} + x^{15} + x^{14} + x^{12}, \\
p_9(x) &= x^{132} + x^{124} + x^{118} + x^{112} + x^{104} + x^{98} + x^{96} + x^{88} + x^{84} + x^{82} + x^{80} \\
& + x^{76} + x^{72} + x^{70} + x^{68} + x^{66} + x^{64} + x^{60} + x^{54} + x^{52} + x^{50} + x^{48} \\
& + x^{44} + x^{42} + x^{40} + x^{38} + x^{32} + x^{28} + x^{26} + x^{14} + x^{12} + x^6, \\
p_{12}(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{126} + x^{124} + x^{123} + x^{122} + x^{120} \\
& + x^{119} + x^{115} + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{62} \\
& + x^{60} + x^{59} + x^{58} + x^{56} + x^{55} + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} \\
& + x^{28} + x^{19} + x^{14} + x^{12} + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, 0, 0, 1, 0]$.

For $\phi(W^e, 1, 0)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{135} + x^{134} + x^{131} + x^{130} + x^{128} \\
& + x^{127} + x^{124} + x^{122} + x^{120} + x^{119} + x^{117} + x^{116} + x^{115} + x^{113} \\
& + x^{111} + x^{110} + x^{108} + x^{106} + x^{105} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} \\
& + x^{92} + x^{90} + x^{89} + x^{88} + x^{87} + x^{85} + x^{82} + x^{81} + x^{80} + x^{79} + x^{78} \\
& + x^{76} + x^{75} + x^{73} + x^{72} + x^{71} + x^{69} + x^{68} + x^{67} + x^{66} + x^{65} + x^{62} \\
& + x^{61} + x^{57} + x^{56} + x^{52} + x^{49} + x^{45} + x^{44} + x^{43} + x^{40} + x^{38} + x^{36} \\
& + x^{33}, \\
p_3(x) &= x^{102} + x^{92} + x^{86} + x^{84} + x^{78} + x^{74} + x^{70} + x^{60} + x^{54} + x^{52} + x^{42} \\
& + x^{36} + x^{30} + x^{28} + x^{22} + x^{18}, \\
p_6(x) &= x^{117} + x^{113} + x^{112} + x^{110} + x^{109} + x^{107} + x^{105} + x^{104} + x^{101} + x^{100} \\
& + x^{99} + x^{98} + x^{97} + x^{94} + x^{93} + x^{91} + x^{88} + x^{83} + x^{79} + x^{78} + x^{76} \\
& + x^{75} + x^{73} + x^{71} + x^{70} + x^{69} + x^{67} + x^{66} + x^{65} + x^{62} + x^{59} + x^{57} \\
& + x^{54} + x^{47} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} + x^{37} + x^{36} + x^{35} + x^{32} \\
& + x^{29} + x^{27} + x^{25} + x^{24} + x^{23} + x^{21} + x^{20} + x^{16} + x^{15} + x^{14} + x^{12}, \\
p_9(x) &= x^{132} + x^{124} + x^{118} + x^{112} + x^{104} + x^{98} + x^{96} + x^{88} + x^{84} + x^{82} + x^{80} \\
& + x^{76} + x^{72} + x^{70} + x^{68} + x^{66} + x^{64} + x^{60} + x^{54} + x^{52} + x^{50} + x^{48} \\
& + x^{44} + x^{42} + x^{40} + x^{38} + x^{32} + x^{28} + x^{26} + x^{14} + x^{12} + x^6, \\
p_{12}(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{126} + x^{124} + x^{123} + x^{122} + x^{120}
\end{aligned}$$

$$\begin{aligned}
& + x^{119} + x^{115} + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{62} \\
& + x^{60} + x^{59} + x^{58} + x^{56} + x^{55} + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} \\
& + x^{28} + x^{19} + x^{14} + x^{12} + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, 0, 0, 1, 0]$.

For $\phi(W^e, 1, 1)$:

$$\begin{aligned}
p_0(x) &= x^{156} + x^{152} + x^{148} + x^{146} + x^{144} + x^{140} + x^{138} + x^{136} + x^{132} + x^{130} \\
&+ x^{128} + x^{126} + x^{124} + x^{122} + x^{120} + x^{118} + x^{116} + x^{114} + x^{112} \\
&+ x^{108} + x^{104} + x^{100} + x^{98} + x^{94} + x^{92} + x^{90} + x^{86} + x^{80} + x^{78} + x^{76} \\
&+ x^{74} + x^{62} + x^{60} + x^{56} + x^{52} + x^{48} + x^{42}, \\
p_3(x) &= x^{146} + x^{142} + x^{116} + x^{112} + x^{108} + x^{100} + x^{98} + x^{94} + x^{92} + x^{88} \\
&+ x^{86} + x^{84} + x^{80} + x^{78} + x^{76} + x^{72} + x^{66} + x^{62} + x^{54} + x^{52} + x^{50} \\
&+ x^{44} + x^{42} + x^{40} + x^{38} + x^{34} + x^{32} + x^{26} + x^{16} + x^{12}, \\
p_6(x) &= x^{148} + x^{146} + x^{144} + x^{140} + x^{136} + x^{134} + x^{132} + x^{128} + x^{126} + x^{122} \\
&+ x^{118} + x^{116} + x^{110} + x^{104} + x^{98} + x^{96} + x^{94} + x^{86} + x^{82} + x^{76} \\
&+ x^{66} + x^{62} + x^{60} + x^{58} + x^{56} + x^{54} + x^{46} + x^{42} + x^{40} + x^{34} + x^{32} \\
&+ x^{28} + x^{24} + x^{20} + x^{16} + x^{12} + x^{10} + 1, \\
p_9(x) &= x^{146} + x^{142} + x^{138} + x^{134} + x^{132} + x^{128} + x^{118} + x^{114} + x^{110} + x^{104} \\
&+ x^{100} + x^{92} + x^{90} + x^{86} + x^{84} + x^{78} + x^{72} + x^{66} + x^{62} + x^{54} + x^{52} \\
&+ x^{48} + x^{46} + x^{44} + x^{42} + x^{38} + x^{36} + x^{34} + x^{32} + x^{30} + x^{26} + x^{20} \\
&+ x^{18} + x^{16} + x^{14} + x^{10} + x^8 + x^4, \\
p_{12}(x) &= x^{156} + x^{152} + x^{140} + x^{136} + x^{116} + x^{112} + x^{92} + x^{88} + x^{76} + x^{72} \\
&+ x^{52} + x^{48} + x^{44} + x^{40} + x^{28} + x^{24} + x^4 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0]$.

For $\phi(M^o, 0, 0)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} \\
&+ x^{129} + x^{128} + x^{124} + x^{123} + x^{121} + x^{119} + x^{118} + x^{117} + x^{115} \\
&+ x^{114} + x^{112} + x^{106} + x^{101} + x^{98} + x^{97} + x^{95} + x^{94} + x^{91} + x^{89} \\
&+ x^{86} + x^{85} + x^{82} + x^{80} + x^{78} + x^{76} + x^{75} + x^{74} + x^{73} + x^{71} + x^{70} \\
&+ x^{69} + x^{68} + x^{64} + x^{61} + x^{58} + x^{55} + x^{52} + x^{49} + x^{46} + x^{44} + x^{43} \\
&+ x^{42} + x^{41} + x^{37} + x^{33} + x^{32} + x^{31} + x^{28} + x^{27} + x^{26} + x^{24}, \\
p_3(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{119} + x^{117} + x^{115} + x^{114} + x^{111} + x^{110} \\
&+ x^{109} + x^{108} + x^{104} + x^{103} + x^{101} + x^{99} + x^{98} + x^{97} + x^{95} + x^{94} \\
&+ x^{92} + x^{86} + x^{81} + x^{78} + x^{77} + x^{75} + x^{74} + x^{69} + x^{65} + x^{64} + x^{63} \\
&+ x^{62} + x^{61} + x^{60} + x^{56} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{45} + x^{44} \\
&+ x^{41} + x^{40} + x^{38} + x^{36} + x^{35} + x^{34} + x^{32} + x^{31} + x^{30} + x^{29} + x^{27}
\end{aligned}$$

$$\begin{aligned}
& + x^{26} + x^{25} + x^{23} + x^{20} + x^{19} + x^{18} + x^{16}, \\
p_6(x) = & x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} + x^{129} + x^{128} + x^{127} + x^{124} \\
& + x^{123} + x^{122} + x^{120} + x^{117} + x^{113} + x^{111} + x^{109} + x^{108} + x^{105} \\
& + x^{101} + x^{100} + x^{99} + x^{97} + x^{94} + x^{93} + x^{91} + x^{87} + x^{86} + x^{80} + x^{78} \\
& + x^{72} + x^{71} + x^{69} + x^{67} + x^{62} + x^{60} + x^{59} + x^{57} + x^{54} + x^{52} + x^{48} \\
& + x^{47} + x^{46} + x^{41} + x^{40} + x^{37} + x^{36} + x^{34} + x^{32} + x^{30} + x^{29} + x^{26} \\
& + x^{21} + x^{20} + x^{18} + x^{17} + x^{15} + x^{14} + x^7 + x^3 + x^2 + 1, \\
p_9(x) = & x^{127} + x^{123} + x^{122} + x^{120} + x^{63} + x^{59} + x^{58} + x^{56} + x^{15} + x^{11} + x^{10} \\
& + x^8, \\
p_{12}(x) = & x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{127} + x^{126} + x^{124} + x^{119} + x^{115} \\
& + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{63} + x^{62} + x^{60} + x^{55} \\
& + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} + x^{28} + x^{19} + x^{15} + x^{14} + x^{12} \\
& + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[1, 0, 0, 0, 1, 0, 0, 1, 1, 1, 0, 0, 1, 1, 0, 0]$.

For $\phi(M^o, 0, 1)$:

$$\begin{aligned}
p_0(x) = & x^{148} + x^{133} + x^{131} + x^{125} + x^{121} + x^{118} + x^{117} + x^{115} + x^{113} + x^{111} \\
& + x^{110} + x^{108} + x^{107} + x^{106} + x^{104} + x^{103} + x^{99} + x^{97} + x^{96} + x^{92} \\
& + x^{90} + x^{86} + x^{84} + x^{81} + x^{80} + x^{78} + x^{77} + x^{76} + x^{73} + x^{67} + x^{63} \\
& + x^{61} + x^{58} + x^{53} + x^{51} + x^{47} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} \\
& + x^{38} + x^{37} + x^{36} + x^{34} + x^{33}, \\
p_3(x) = & x^{103} + x^{99} + x^{98} + x^{96} + x^{93} + x^{88} + x^{87} + x^{86} + x^{84} + x^{83} + x^{78} \\
& + x^{77} + x^{76} + x^{74} + x^{71} + x^{67} + x^{66} + x^{64} + x^{61} + x^{56} + x^{55} + x^{54} \\
& + x^{52} + x^{51} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{40} + x^{37} + x^{32} + x^{31} \\
& + x^{30} + x^{28} + x^{27} + x^{22} + x^{21} + x^{20} + x^{18}, \\
p_6(x) = & x^{118} + x^{108} + x^{104} + x^{100} + x^{96} + x^{92} + x^{90} + x^{88} + x^{84} + x^{74} + x^{64} \\
& + x^{62} + x^{60} + x^{58} + x^{56} + x^{54} + x^{48} + x^{42} + x^{34} + x^{32} + x^{30} + x^{28} \\
& + x^{20} + x^{18} + x^{16} + x^{12}, \\
p_9(x) = & x^{133} + x^{129} + x^{128} + x^{126} + x^{125} + x^{121} + x^{120} + x^{118} + x^{69} + x^{65} \\
& + x^{64} + x^{62} + x^{61} + x^{57} + x^{56} + x^{54} + x^{21} + x^{17} + x^{16} + x^{14} + x^{13} \\
& + x^9 + x^8 + x^6, \\
p_{12}(x) = & x^{148} + x^{140} + x^{132} + x^{124} + x^{120} + x^{112} + x^{84} + x^{76} + x^{68} + x^{60} \\
& + x^{56} + x^{48} + x^{36} + x^{28} + x^{20} + x^{12} + x^8 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0]$.

For $\phi(M^o, 1, 0)$:

$$p_0(x) = x^{160} + x^{145} + x^{143} + x^{140} + x^{137} + x^{133} + x^{132} + x^{129} + x^{127} + x^{124}$$

$$\begin{aligned}
& + x^{122} + x^{120} + x^{119} + x^{118} + x^{116} + x^{114} + x^{113} + x^{111} + x^{110} \\
& + x^{108} + x^{104} + x^{103} + x^{102} + x^{101} + x^{99} + x^{98} + x^{96} + x^{92} + x^{90} \\
& + x^{88} + x^{86} + x^{85} + x^{83} + x^{81} + x^{79} + x^{76} + x^{75} + x^{74} + x^{72} + x^{70} \\
& + x^{69} + x^{67} + x^{66} + x^{63} + x^{60} + x^{59} + x^{54} + x^{53} + x^{52} + x^{51} + x^{46} \\
& + x^{44} + x^{42} + x^{41} + x^{35} + x^{33}, \\
p_3(x) = & x^{115} + x^{111} + x^{110} + x^{108} + x^{105} + x^{100} + x^{99} + x^{98} + x^{96} + x^{91} \\
& + x^{89} + x^{87} + x^{86} + x^{85} + x^{82} + x^{79} + x^{77} + x^{74} + x^{73} + x^{68} + x^{67} \\
& + x^{66} + x^{64} + x^{57} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{46} + x^{45} + x^{43} \\
& + x^{40} + x^{35} + x^{33} + x^{31} + x^{30} + x^{29} + x^{27} + x^{26} + x^{22} + x^{21} + x^{20} \\
& + x^{18}, \\
p_6(x) = & x^{130} + x^{120} + x^{116} + x^{112} + x^{110} + x^{108} + x^{104} + x^{94} + x^{84} + x^{82} \\
& + x^{80} + x^{78} + x^{76} + x^{68} + x^{66} + x^{64} + x^{62} + x^{60} + x^{54} + x^{52} + x^{50} \\
& + x^{48} + x^{40} + x^{38} + x^{36} + x^{32} + x^{26} + x^{18} + x^{16} + x^{12}, \\
p_9(x) = & x^{145} + x^{141} + x^{140} + x^{138} + x^{137} + x^{133} + x^{132} + x^{130} + x^{125} + x^{121} \\
& + x^{120} + x^{118} + x^{81} + x^{77} + x^{76} + x^{74} + x^{73} + x^{69} + x^{68} + x^{66} + x^{61} \\
& + x^{57} + x^{56} + x^{54} + x^{33} + x^{29} + x^{28} + x^{26} + x^{25} + x^{21} + x^{20} + x^{18} \\
& + x^{13} + x^9 + x^8 + x^6, \\
p_{12}(x) = & x^{160} + x^{152} + x^{144} + x^{140} + x^{136} + x^{132} + x^{112} + x^{96} + x^{88} + x^{80} \\
& + x^{76} + x^{72} + x^{68} + x^{40} + x^{32} + x^{28} + x^{24} + x^{20} + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, 1, 1, 0, 1]$.

For $\phi(M^o, 1, 1)$:

$$\begin{aligned}
p_0(x) = & x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} \\
& + x^{129} + x^{128} + x^{127} + x^{124} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} \\
& + x^{115} + x^{114} + x^{113} + x^{111} + x^{110} + x^{109} + x^{105} + x^{101} + x^{100} \\
& + x^{99} + x^{96} + x^{94} + x^{92} + x^{87} + x^{82} + x^{81} + x^{79} + x^{77} + x^{76} + x^{75} \\
& + x^{73} + x^{72} + x^{71} + x^{67} + x^{66} + x^{65} + x^{63} + x^{61} + x^{60} + x^{59} + x^{55} \\
& + x^{54} + x^{53} + x^{51} + x^{43} + x^{42}, \\
p_3(x) = & x^{127} + x^{123} + x^{122} + x^{120} + x^{119} + x^{117} + x^{115} + x^{114} + x^{111} + x^{110} \\
& + x^{109} + x^{108} + x^{107} + x^{104} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{95} \\
& + x^{94} + x^{93} + x^{91} + x^{90} + x^{89} + x^{87} + x^{85} + x^{83} + x^{82} + x^{81} + x^{77} \\
& + x^{76} + x^{75} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{64} + x^{63} + x^{62} + x^{59} \\
& + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{49} + x^{48} + x^{47} \\
& + x^{45} + x^{44} + x^{43} + x^{42} + x^{38} + x^{37} + x^{33} + x^{32} + x^{25} + x^{23} + x^{22}, \\
p_6(x) = & x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} + x^{129} + x^{128} + x^{124} + x^{112} \\
& + x^{111} + x^{110} + x^{108} + x^{104} + x^{103} + x^{102} + x^{100} + x^{98} + x^{91} + x^{88}
\end{aligned}$$

$$\begin{aligned}
& + x^{84} + x^{83} + x^{80} + x^{76} + x^{75} + x^{74} + x^{73} + x^{71} + x^{68} + x^{66} + x^{65} \\
& + x^{63} + x^{60} + x^{58} + x^{56} + x^{55} + x^{54} + x^{51} + x^{48} + x^{44} + x^{40} + x^{39} \\
& + x^{34} + x^{31} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{19} + x^{17} + x^{15} + x^{12} \\
& + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1, \\
p_9(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{63} + x^{59} + x^{58} + x^{56} + x^{15} + x^{11} + x^{10} \\
& + x^8, \\
p_{12}(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{127} + x^{126} + x^{124} + x^{119} + x^{115} \\
& + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{63} + x^{62} + x^{60} + x^{55} \\
& + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} + x^{28} + x^{19} + x^{15} + x^{14} + x^{12} \\
& + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 0, 0, 1, 0, 1, 1, 0, 0, 1, 0, 0]$.

For $\phi(W^o, 0, 0)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} \\
& + x^{129} + x^{128} + x^{124} + x^{123} + x^{121} + x^{119} + x^{118} + x^{117} + x^{115} \\
& + x^{114} + x^{112} + x^{106} + x^{101} + x^{98} + x^{97} + x^{95} + x^{94} + x^{91} + x^{89} \\
& + x^{86} + x^{85} + x^{82} + x^{80} + x^{78} + x^{76} + x^{75} + x^{74} + x^{73} + x^{71} + x^{70} \\
& + x^{69} + x^{68} + x^{64} + x^{61} + x^{58} + x^{55} + x^{52} + x^{49} + x^{46} + x^{44} + x^{43} \\
& + x^{42} + x^{41} + x^{37} + x^{33} + x^{32} + x^{31} + x^{28} + x^{27} + x^{26} + x^{24}, \\
p_3(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{119} + x^{117} + x^{115} + x^{114} + x^{111} + x^{110} \\
& + x^{109} + x^{108} + x^{104} + x^{103} + x^{101} + x^{99} + x^{98} + x^{97} + x^{95} + x^{94} \\
& + x^{92} + x^{86} + x^{81} + x^{78} + x^{77} + x^{75} + x^{74} + x^{69} + x^{65} + x^{64} + x^{63} \\
& + x^{62} + x^{61} + x^{60} + x^{56} + x^{52} + x^{51} + x^{50} + x^{49} + x^{48} + x^{45} + x^{44} \\
& + x^{41} + x^{40} + x^{38} + x^{36} + x^{35} + x^{34} + x^{32} + x^{31} + x^{30} + x^{29} + x^{27} \\
& + x^{26} + x^{25} + x^{23} + x^{20} + x^{19} + x^{18} + x^{16}, \\
p_6(x) &= x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} + x^{129} + x^{128} + x^{127} + x^{124} \\
& + x^{123} + x^{122} + x^{120} + x^{117} + x^{113} + x^{111} + x^{109} + x^{108} + x^{105} \\
& + x^{101} + x^{100} + x^{99} + x^{97} + x^{94} + x^{93} + x^{91} + x^{87} + x^{86} + x^{80} + x^{78} \\
& + x^{72} + x^{71} + x^{69} + x^{67} + x^{62} + x^{60} + x^{59} + x^{57} + x^{54} + x^{52} + x^{48} \\
& + x^{47} + x^{46} + x^{41} + x^{40} + x^{37} + x^{36} + x^{34} + x^{32} + x^{30} + x^{29} + x^{26} \\
& + x^{21} + x^{20} + x^{18} + x^{17} + x^{15} + x^{14} + x^7 + x^3 + x^2 + 1, \\
p_9(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{63} + x^{59} + x^{58} + x^{56} + x^{15} + x^{11} + x^{10} \\
& + x^8, \\
p_{12}(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{127} + x^{126} + x^{124} + x^{119} + x^{115} \\
& + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{63} + x^{62} + x^{60} + x^{55} \\
& + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} + x^{28} + x^{19} + x^{15} + x^{14} + x^{12}
\end{aligned}$$

$$+ x^7 + x^3 + x^2 + 1,$$

and the initial terms are $[1, 0, 0, 0, 1, 0, 0, 1, 1, 1, 0, 0, 1, 1, 0, 0]$.

For $\phi(W^o, 0, 1)$:

$$\begin{aligned} p_0(x) = & x^{160} + x^{145} + x^{143} + x^{140} + x^{137} + x^{133} + x^{132} + x^{129} + x^{127} + x^{124} \\ & + x^{122} + x^{120} + x^{119} + x^{118} + x^{116} + x^{114} + x^{113} + x^{111} + x^{110} \\ & + x^{108} + x^{104} + x^{103} + x^{102} + x^{101} + x^{99} + x^{98} + x^{96} + x^{92} + x^{90} \\ & + x^{88} + x^{86} + x^{85} + x^{83} + x^{81} + x^{79} + x^{76} + x^{75} + x^{74} + x^{72} + x^{70} \\ & + x^{69} + x^{67} + x^{66} + x^{63} + x^{60} + x^{59} + x^{54} + x^{53} + x^{52} + x^{51} + x^{46} \\ & + x^{44} + x^{42} + x^{41} + x^{35} + x^{33}, \end{aligned}$$

$$\begin{aligned} p_3(x) = & x^{115} + x^{111} + x^{110} + x^{108} + x^{105} + x^{100} + x^{99} + x^{98} + x^{96} + x^{91} \\ & + x^{89} + x^{87} + x^{86} + x^{85} + x^{82} + x^{79} + x^{77} + x^{74} + x^{73} + x^{68} + x^{67} \\ & + x^{66} + x^{64} + x^{57} + x^{53} + x^{52} + x^{51} + x^{50} + x^{49} + x^{46} + x^{45} + x^{43} \\ & + x^{40} + x^{35} + x^{33} + x^{31} + x^{30} + x^{29} + x^{27} + x^{26} + x^{22} + x^{21} + x^{20} \\ & + x^{18}, \end{aligned}$$

$$\begin{aligned} p_6(x) = & x^{130} + x^{120} + x^{116} + x^{112} + x^{110} + x^{108} + x^{104} + x^{94} + x^{84} + x^{82} \\ & + x^{80} + x^{78} + x^{76} + x^{68} + x^{66} + x^{64} + x^{62} + x^{60} + x^{54} + x^{52} + x^{50} \\ & + x^{48} + x^{40} + x^{38} + x^{36} + x^{32} + x^{26} + x^{18} + x^{16} + x^{12}, \end{aligned}$$

$$\begin{aligned} p_9(x) = & x^{145} + x^{141} + x^{140} + x^{138} + x^{137} + x^{133} + x^{132} + x^{130} + x^{125} + x^{121} \\ & + x^{120} + x^{118} + x^{81} + x^{77} + x^{76} + x^{74} + x^{73} + x^{69} + x^{68} + x^{66} + x^{61} \\ & + x^{57} + x^{56} + x^{54} + x^{33} + x^{29} + x^{28} + x^{26} + x^{25} + x^{21} + x^{20} + x^{18} \\ & + x^{13} + x^9 + x^8 + x^6, \end{aligned}$$

$$\begin{aligned} p_{12}(x) = & x^{160} + x^{152} + x^{144} + x^{140} + x^{136} + x^{132} + x^{112} + x^{96} + x^{88} + x^{80} \\ & + x^{76} + x^{72} + x^{68} + x^{40} + x^{32} + x^{28} + x^{24} + x^{20} + 1, \end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 1, 1, 1, 0, 1]$.

For $\phi(W^o, 1, 0)$:

$$\begin{aligned} p_0(x) = & x^{148} + x^{133} + x^{131} + x^{125} + x^{121} + x^{118} + x^{117} + x^{115} + x^{113} + x^{111} \\ & + x^{110} + x^{108} + x^{107} + x^{106} + x^{104} + x^{103} + x^{99} + x^{97} + x^{96} + x^{92} \\ & + x^{90} + x^{86} + x^{84} + x^{81} + x^{80} + x^{78} + x^{77} + x^{76} + x^{73} + x^{67} + x^{63} \\ & + x^{61} + x^{58} + x^{53} + x^{51} + x^{47} + x^{44} + x^{43} + x^{42} + x^{41} + x^{40} + x^{39} \\ & + x^{38} + x^{37} + x^{36} + x^{34} + x^{33}, \end{aligned}$$

$$\begin{aligned} p_3(x) = & x^{103} + x^{99} + x^{98} + x^{96} + x^{93} + x^{88} + x^{87} + x^{86} + x^{84} + x^{83} + x^{78} \\ & + x^{77} + x^{76} + x^{74} + x^{71} + x^{67} + x^{66} + x^{64} + x^{61} + x^{56} + x^{55} + x^{54} \\ & + x^{52} + x^{51} + x^{47} + x^{46} + x^{45} + x^{44} + x^{43} + x^{40} + x^{37} + x^{32} + x^{31} \\ & + x^{30} + x^{28} + x^{27} + x^{22} + x^{21} + x^{20} + x^{18}, \end{aligned}$$

$$p_6(x) = x^{118} + x^{108} + x^{104} + x^{100} + x^{96} + x^{92} + x^{90} + x^{88} + x^{84} + x^{74} + x^{64}$$

$$\begin{aligned}
& + x^{62} + x^{60} + x^{58} + x^{56} + x^{54} + x^{48} + x^{42} + x^{34} + x^{32} + x^{30} + x^{28} \\
& + x^{20} + x^{18} + x^{16} + x^{12}, \\
p_9(x) &= x^{133} + x^{129} + x^{128} + x^{126} + x^{125} + x^{121} + x^{120} + x^{118} + x^{69} + x^{65} \\
& + x^{64} + x^{62} + x^{61} + x^{57} + x^{56} + x^{54} + x^{21} + x^{17} + x^{16} + x^{14} + x^{13} \\
& + x^9 + x^8 + x^6, \\
p_{12}(x) &= x^{148} + x^{140} + x^{132} + x^{124} + x^{120} + x^{112} + x^{84} + x^{76} + x^{68} + x^{60} \\
& + x^{56} + x^{48} + x^{36} + x^{28} + x^{20} + x^{12} + x^8 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 1, 0, 1, 0, 0, 0, 0, 1, 0, 0, 0, 1, 0]$.

For $\phi(W^o, 1, 1)$:

$$\begin{aligned}
p_0(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} \\
& + x^{129} + x^{128} + x^{127} + x^{124} + x^{122} + x^{121} + x^{120} + x^{119} + x^{118} \\
& + x^{115} + x^{114} + x^{113} + x^{111} + x^{110} + x^{109} + x^{105} + x^{101} + x^{100} \\
& + x^{99} + x^{96} + x^{94} + x^{92} + x^{87} + x^{82} + x^{81} + x^{79} + x^{77} + x^{76} + x^{75} \\
& + x^{73} + x^{72} + x^{71} + x^{67} + x^{66} + x^{65} + x^{63} + x^{61} + x^{60} + x^{59} + x^{55} \\
& + x^{54} + x^{53} + x^{51} + x^{43} + x^{42}, \\
p_3(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{119} + x^{117} + x^{115} + x^{114} + x^{111} + x^{110} \\
& + x^{109} + x^{108} + x^{107} + x^{104} + x^{102} + x^{101} + x^{100} + x^{99} + x^{98} + x^{95} \\
& + x^{94} + x^{93} + x^{91} + x^{90} + x^{89} + x^{87} + x^{85} + x^{83} + x^{82} + x^{81} + x^{77} \\
& + x^{76} + x^{75} + x^{72} + x^{71} + x^{70} + x^{69} + x^{68} + x^{64} + x^{63} + x^{62} + x^{59} \\
& + x^{58} + x^{57} + x^{56} + x^{55} + x^{54} + x^{53} + x^{52} + x^{51} + x^{49} + x^{48} + x^{47} \\
& + x^{45} + x^{44} + x^{43} + x^{42} + x^{38} + x^{37} + x^{33} + x^{32} + x^{25} + x^{23} + x^{22}, \\
p_6(x) &= x^{139} + x^{137} + x^{135} + x^{134} + x^{131} + x^{130} + x^{129} + x^{128} + x^{124} + x^{112} \\
& + x^{111} + x^{110} + x^{108} + x^{104} + x^{103} + x^{102} + x^{100} + x^{98} + x^{91} + x^{88} \\
& + x^{84} + x^{83} + x^{80} + x^{76} + x^{75} + x^{74} + x^{73} + x^{71} + x^{68} + x^{66} + x^{65} \\
& + x^{63} + x^{60} + x^{58} + x^{56} + x^{55} + x^{54} + x^{51} + x^{48} + x^{44} + x^{40} + x^{39} \\
& + x^{34} + x^{31} + x^{28} + x^{27} + x^{26} + x^{25} + x^{24} + x^{19} + x^{17} + x^{15} + x^{12} \\
& + x^{11} + x^{10} + x^8 + x^7 + x^3 + x^2 + 1, \\
p_9(x) &= x^{127} + x^{123} + x^{122} + x^{120} + x^{63} + x^{59} + x^{58} + x^{56} + x^{15} + x^{11} + x^{10} \\
& + x^8, \\
p_{12}(x) &= x^{147} + x^{143} + x^{142} + x^{140} + x^{131} + x^{127} + x^{126} + x^{124} + x^{119} + x^{115} \\
& + x^{114} + x^{112} + x^{83} + x^{79} + x^{78} + x^{76} + x^{67} + x^{63} + x^{62} + x^{60} + x^{55} \\
& + x^{51} + x^{50} + x^{48} + x^{35} + x^{31} + x^{30} + x^{28} + x^{19} + x^{15} + x^{14} + x^{12} \\
& + x^7 + x^3 + x^2 + 1,
\end{aligned}$$

and the initial terms are $[0, 0, 0, 0, 0, 0, 1, 0, 1, 1, 0, 0, 1, 0, 0]$.

Below is the transition function and output function of an 2-automaton that generates $T = M_{0,0}^o$:

Transition function $(n, j) \mapsto \delta(n, j)$ ($\Lambda(n) := [\delta(n, 0), \delta(n, 1)]$):

n	$\Lambda(n)$	n	$\Lambda(n)$	n	$\Lambda(n)$	n	$\Lambda(n)$
0	[1, 2]	1927	[1466, 3089]	3854	[2297, 5193]	5781	[825, 4207]
1	[3, 4]	1928	[3090, 3091]	3855	[4270, 2597]	5782	[1778, 6715]
2	[5, 6]	1929	[3092, 3093]	3856	[2290, 1993]	5783	[5051, 4147]
3	[7, 8]	1930	[1229, 1331]	3857	[188, 4810]	5784	[6716, 1960]
4	[9, 10]	1931	[3094, 3095]	3858	[5194, 5195]	5785	[4655, 1816]
5	[11, 12]	1932	[2863, 1533]	3859	[5196, 5197]	5786	[847, 2484]
6	[13, 14]	1933	[3096, 3097]	3860	[4711, 5198]	5787	[1647, 6636]
7	[15, 16]	1934	[3098, 3099]	3861	[5199, 2595]	5788	[2509, 4637]
8	[17, 18]	1935	[3100, 3101]	3862	[4778, 5200]	5789	[2164, 2096]
9	[19, 20]	1936	[3102, 3103]	3863	[1609, 1646]	5790	[2076, 5132]
10	[21, 22]	1937	[3104, 3105]	3864	[5201, 676]	5791	[4805, 6717]
11	[23, 24]	1938	[3106, 3107]	3865	[2426, 2281]	5792	[4952, 5210]
12	[25, 26]	1939	[3108, 3109]	3866	[5202, 1988]	5793	[4089, 2072]
13	[27, 28]	1940	[3110, 333]	3867	[4231, 242]	5794	[5169, 6550]
14	[29, 30]	1941	[1297, 1452]	3868	[1899, 811]	5795	[3975, 6718]
15	[31, 32]	1942	[3111, 2952]	3869	[839, 4121]	5796	[6560, 4578]
16	[33, 34]	1943	[1368, 449]	3870	[4340, 4045]	5797	[6716, 6719]
17	[35, 36]	1944	[3112, 3113]	3871	[5203, 5204]	5798	[5238, 6720]
18	[37, 38]	1945	[3114, 2743]	3872	[4659, 2468]	5799	[4505, 690]
19	[39, 40]	1946	[3115, 3116]	3873	[5205, 5206]	5800	[2170, 2372]
20	[41, 42]	1947	[3117, 3118]	3874	[5207, 5208]	5801	[1843, 4994]
21	[43, 44]	1948	[3119, 1060]	3875	[4705, 4585]	5802	[6721, 3971]
22	[45, 46]	1949	[3120, 3121]	3876	[5209, 5210]	5803	[5019, 2490]
23	[47, 45]	1950	[3122, 945]	3877	[5153, 4200]	5804	[6722, 4946]
24	[48, 49]	1951	[1081, 2907]	3878	[5211, 679]	5805	[6723, 6724]
25	[50, 51]	1952	[3123, 1517]	3879	[4726, 5041]	5806	[6725, 2125]
26	[52, 53]	1953	[3124, 3125]	3880	[5212, 5213]	5807	[4899, 4617]
27	[54, 55]	1954	[3126, 3127]	3881	[610, 4077]	5808	[6726, 6727]
28	[56, 57]	1955	[3128, 3129]	3882	[5214, 5215]	5809	[4934, 5024]
29	[58, 59]	1956	[3130, 3131]	3883	[5216, 2237]	5810	[4312, 4566]
30	[60, 61]	1957	[3132, 1414]	3884	[4113, 5217]	5811	[725, 6728]
31	[62, 63]	1958	[1568, 3133]	3885	[5218, 5208]	5812	[837, 1762]
32	[64, 65]	1959	[3134, 3135]	3886	[190, 4126]	5813	[6729, 6730]
33	[66, 67]	1960	[298, 3136]	3887	[4256, 4997]	5814	[6731, 1981]
34	[68, 69]	1961	[3137, 3138]	3888	[2172, 5219]	5815	[4480, 4448]
35	[70, 71]	1962	[3139, 1349]	3889	[5220, 4031]	5816	[6732, 565]
36	[72, 73]	1963	[3140, 3141]	3890	[5077, 4142]	5817	[6733, 6611]
37	[74, 75]	1964	[3142, 3143]	3891	[4003, 5221]	5818	[4186, 4450]
38	[76, 77]	1965	[3144, 1107]	3892	[2443, 5222]	5819	[4772, 4882]
39	[78, 79]	1966	[3145, 3146]	3893	[632, 5223]	5820	[4759, 4095]
40	[80, 81]	1967	[3147, 2760]	3894	[4285, 5224]	5821	[6734, 2219]

41	[82, 83]	1968	[3148, 3149]	3895	[1904, 4344]	5822	[6378, 4964]
42	[84, 85]	1969	[3150, 3151]	3896	[2273, 5193]	5823	[4745, 6715]
43	[86, 87]	1970	[3152, 3153]	3897	[2336, 205]	5824	[170, 6735]
44	[88, 89]	1971	[3154, 3155]	3898	[59, 4324]	5825	[6380, 6408]
45	[90, 91]	1972	[3156, 2675]	3899	[5225, 4647]	5826	[150, 1882]
46	[92, 93]	1973	[3157, 1180]	3900	[5226, 2194]	5827	[6736, 2033]
47	[94, 95]	1974	[1557, 3158]	3901	[5227, 4438]	5828	[4814, 6737]
48	[96, 97]	1975	[2808, 3159]	3902	[893, 5228]	5829	[6719, 2449]
49	[98, 99]	1976	[3160, 3161]	3903	[5187, 4521]	5830	[2069, 5117]
50	[100, 101]	1977	[3162, 3163]	3904	[2007, 4601]	5831	[4457, 4954]
51	[102, 103]	1978	[1233, 3164]	3905	[1740, 4899]	5832	[6738, 6739]
52	[104, 105]	1979	[3165, 3166]	3906	[4332, 4734]	5833	[6740, 2348]
53	[106, 107]	1980	[3167, 3168]	3907	[2368, 5229]	5834	[6741, 5022]
54	[108, 109]	1981	[3169, 3170]	3908	[4589, 1734]	5835	[6742, 1858]
55	[110, 111]	1982	[3171, 3080]	3909	[5230, 4452]	5836	[6743, 6744]
56	[112, 110]	1983	[3172, 3173]	3910	[5065, 1758]	5837	[6745, 6594]
57	[113, 114]	1984	[3174, 3175]	3911	[2381, 4692]	5838	[568, 4218]
58	[115, 116]	1985	[3176, 3177]	3912	[1777, 32]	5839	[6746, 6747]
59	[117, 118]	1986	[3178, 3179]	3913	[5180, 5231]	5840	[6540, 656]
60	[119, 120]	1987	[3180, 3181]	3914	[4563, 1840]	5841	[5204, 4917]
61	[121, 122]	1988	[3182, 1550]	3915	[2603, 5232]	5842	[2523, 6620]
62	[123, 124]	1989	[3183, 3184]	3916	[4763, 5233]	5843	[828, 5198]
63	[125, 126]	1990	[3185, 3186]	3917	[5234, 5235]	5844	[6748, 6749]
64	[127, 128]	1991	[94, 3187]	3918	[177, 2128]	5845	[4455, 4662]
65	[129, 130]	1992	[3188, 3189]	3919	[4550, 4179]	5846	[1763, 1611]
66	[131, 132]	1993	[3190, 3191]	3920	[2140, 5236]	5847	[5214, 6678]
67	[133, 134]	1994	[3192, 3193]	3921	[5237, 4634]	5848	[6450, 2181]
68	[135, 136]	1995	[1163, 3194]	3922	[4748, 5238]	5849	[6750, 2358]
69	[137, 138]	1996	[3195, 3196]	3923	[4614, 1781]	5850	[4329, 6751]
70	[139, 140]	1997	[3197, 3198]	3924	[856, 4888]	5851	[6752, 4280]
71	[141, 142]	1998	[3199, 248]	3925	[5239, 5240]	5852	[6753, 2361]
72	[143, 144]	1999	[3200, 2807]	3926	[4292, 1808]	5853	[6754, 6755]
73	[145, 146]	2000	[3201, 2758]	3927	[2193, 5241]	5854	[4768, 6756]
74	[147, 148]	2001	[3202, 3126]	3928	[2033, 5148]	5855	[4171, 6658]
75	[149, 38]	2002	[3203, 3204]	3929	[175, 5182]	5856	[4843, 4167]
76	[150, 151]	2003	[2845, 1580]	3930	[5242, 4511]	5857	[4727, 6457]
77	[152, 153]	2004	[3205, 3206]	3931	[5243, 5094]	5858	[6627, 6718]
78	[154, 155]	2005	[1182, 2973]	3932	[4898, 1741]	5859	[2169, 4983]
79	[156, 157]	2006	[3207, 966]	3933	[1628, 5244]	5860	[6732, 2539]
80	[158, 159]	2007	[3208, 3209]	3934	[2292, 4413]	5861	[515, 6497]
81	[160, 161]	2008	[3210, 3211]	3935	[5245, 5246]	5862	[2199, 2405]
82	[162, 163]	2009	[3212, 3213]	3936	[3984, 4802]	5863	[6757, 2221]
83	[164, 165]	2010	[3119, 120]	3937	[4785, 621]	5864	[6407, 6381]
84	[166, 167]	2011	[1338, 3214]	3938	[5247, 5248]	5865	[4770, 4520]

85	[168, 169]	2012	[3215, 3216]	3939	[637, 5195]	5866	[1773, 1912]
86	[170, 171]	2013	[905, 3217]	3940	[5249, 5250]	5867	[1843, 881]
87	[172, 173]	2014	[3218, 1208]	3941	[5251, 5252]	5868	[6635, 1648]
88	[174, 175]	2015	[3219, 3220]	3942	[187, 5253]	5869	[4561, 6472]
89	[176, 177]	2016	[2616, 2648]	3943	[2568, 5254]	5870	[6758, 6759]
90	[178, 179]	2017	[3221, 3222]	3944	[5255, 4753]	5871	[3992, 2500]
91	[180, 181]	2018	[3223, 3224]	3945	[5256, 5257]	5872	[5001, 6413]
92	[182, 183]	2019	[3225, 3226]	3946	[2222, 1792]	5873	[206, 1935]
93	[184, 185]	2020	[3227, 3228]	3947	[4856, 42]	5874	[6375, 4368]
94	[186, 187]	2021	[3229, 394]	3948	[5049, 2176]	5875	[692, 1948]
95	[188, 189]	2022	[3230, 958]	3949	[5258, 4616]	5876	[4255, 6760]
96	[190, 191]	2023	[3231, 3232]	3950	[224, 5259]	5877	[6761, 1723]
97	[192, 193]	2024	[3233, 3234]	3951	[4879, 4859]	5878	[4463, 6762]
98	[194, 195]	2025	[3235, 3236]	3952	[5260, 5261]	5879	[6652, 2575]
99	[196, 197]	2026	[3237, 3238]	3953	[5262, 3675]	5880	[6763, 6764]
100	[198, 199]	2027	[3239, 3240]	3954	[5263, 5264]	5881	[6738, 6765]
101	[200, 201]	2028	[3241, 1436]	3955	[110, 3492]	5882	[6766, 781]
102	[202, 203]	2029	[3242, 3243]	3956	[1445, 5265]	5883	[6694, 4845]
103	[204, 205]	2030	[333, 3244]	3957	[5266, 1495]	5884	[4712, 4570]
104	[206, 207]	2031	[3245, 460]	3958	[5267, 1424]	5885	[6499, 6484]
105	[208, 209]	2032	[3246, 3247]	3959	[5268, 1499]	5886	[6767, 4805]
106	[210, 211]	2033	[3248, 3249]	3960	[2664, 5269]	5887	[6768, 55]
107	[212, 213]	2034	[3250, 3251]	3961	[1151, 5270]	5888	[4698, 512]
108	[214, 215]	2035	[3252, 290]	3962	[3731, 5271]	5889	[1679, 3987]
109	[216, 217]	2036	[3253, 3254]	3963	[5272, 5273]	5890	[536, 6769]
110	[218, 219]	2037	[326, 3255]	3964	[3817, 1601]	5891	[501, 6717]
111	[220, 221]	2038	[3256, 3257]	3965	[3059, 5274]	5892	[6770, 4854]
112	[222, 223]	2039	[3258, 922]	3966	[1339, 5275]	5893	[4644, 6771]
113	[224, 225]	2040	[3259, 3260]	3967	[5276, 5277]	5894	[5111, 2531]
114	[226, 227]	2041	[3261, 3262]	3968	[5278, 3596]	5895	[892, 4604]
115	[228, 229]	2042	[1027, 3263]	3969	[5279, 5280]	5896	[1686, 6586]
116	[230, 231]	2043	[1524, 3264]	3970	[3611, 3220]	5897	[6401, 4668]
117	[232, 233]	2044	[3265, 3266]	3971	[1494, 1440]	5898	[52, 6707]
118	[234, 235]	2045	[1028, 1393]	3972	[5281, 5282]	5899	[4018, 855]
119	[236, 237]	2046	[3267, 380]	3973	[5283, 5284]	5900	[1775, 6772]
120	[238, 239]	2047	[3268, 3269]	3974	[5285, 5286]	5901	[2515, 4838]
121	[240, 241]	2048	[3270, 3271]	3975	[3334, 5287]	5902	[6773, 6774]
122	[242, 243]	2049	[3272, 464]	3976	[5288, 5289]	5903	[6775, 6776]
123	[244, 245]	2050	[1339, 3273]	3977	[5290, 5291]	5904	[6777, 877]
124	[246, 247]	2051	[1286, 3274]	3978	[5292, 3615]	5905	[6778, 6779]
125	[248, 249]	2052	[3275, 3276]	3979	[5293, 5294]	5906	[4384, 661]
126	[250, 251]	2053	[3277, 3278]	3980	[5295, 3874]	5907	[1945, 3986]
127	[252, 253]	2054	[3279, 2681]	3981	[5296, 1228]	5908	[6780, 1673]
128	[254, 255]	2055	[3280, 3281]	3982	[2915, 3579]	5909	[6781, 6782]

129	[256, 257]	2056	[3282, 1121]	3983	[5297, 5298]	5910	[4684, 2067]
130	[258, 259]	2057	[3283, 3284]	3984	[5299, 3423]	5911	[6783, 692]
131	[260, 261]	2058	[3285, 3286]	3985	[3531, 122]	5912	[6476, 2569]
132	[262, 263]	2059	[463, 1336]	3986	[3936, 3219]	5913	[2504, 5007]
133	[264, 265]	2060	[3287, 251]	3987	[2647, 2992]	5914	[33, 6689]
134	[266, 267]	2061	[3288, 3289]	3988	[5300, 5301]	5915	[4206, 826]
135	[268, 269]	2062	[3290, 3198]	3989	[5302, 5303]	5916	[6733, 1895]
136	[270, 271]	2063	[3291, 3292]	3990	[5304, 5305]	5917	[4232, 4688]
137	[272, 273]	2064	[3293, 1605]	3991	[399, 3118]	5918	[6736, 2610]
138	[274, 275]	2065	[3294, 3295]	3992	[1168, 285]	5919	[6784, 6532]
139	[276, 277]	2066	[3296, 3297]	3993	[1000, 3059]	5920	[4194, 1838]
140	[278, 279]	2067	[3298, 2789]	3994	[5306, 3598]	5921	[1802, 634]
141	[280, 281]	2068	[3299, 3300]	3995	[3431, 3888]	5922	[2113, 6785]
142	[282, 283]	2069	[3286, 3301]	3996	[5307, 5308]	5923	[4135, 4508]
143	[284, 285]	2070	[3302, 279]	3997	[3339, 3547]	5924	[6786, 6787]
144	[286, 287]	2071	[3303, 3304]	3998	[5309, 2718]	5925	[6788, 6789]
145	[288, 289]	2072	[1572, 3305]	3999	[5310, 5311]	5926	[4791, 6578]
146	[290, 291]	2073	[3306, 3307]	4000	[2807, 5312]	5927	[6790, 4867]
147	[292, 293]	2074	[3308, 1036]	4001	[5313, 5314]	5928	[124, 4724]
148	[294, 295]	2075	[3309, 2640]	4002	[5315, 5316]	5929	[6460, 783]
149	[105, 296]	2076	[3310, 3311]	4003	[1373, 5317]	5930	[793, 1859]
150	[297, 298]	2077	[3011, 3312]	4004	[1081, 5318]	5931	[2308, 4625]
151	[299, 300]	2078	[3313, 1259]	4005	[2845, 1189]	5932	[4481, 6396]
152	[301, 302]	2079	[3314, 2805]	4006	[1581, 1490]	5933	[48, 6778]
153	[303, 304]	2080	[3315, 3316]	4007	[410, 5319]	5934	[6791, 591]
154	[305, 306]	2081	[3317, 3318]	4008	[5320, 1292]	5935	[6792, 6680]
155	[307, 308]	2082	[2693, 3319]	4009	[387, 3671]	5936	[2227, 820]
156	[309, 310]	2083	[3320, 3321]	4010	[3909, 2982]	5937	[4856, 6793]
157	[311, 312]	2084	[3217, 1153]	4011	[5321, 5322]	5938	[222, 6794]
158	[313, 314]	2085	[3322, 2801]	4012	[2878, 3305]	5939	[6795, 6796]
159	[315, 316]	2086	[3323, 3324]	4013	[5323, 2887]	5940	[5248, 1837]
160	[317, 318]	2087	[3325, 3326]	4014	[5324, 2672]	5941	[523, 2351]
161	[319, 320]	2088	[285, 3327]	4015	[314, 5325]	5942	[4369, 4669]
162	[321, 322]	2089	[3328, 3329]	4016	[3268, 27]	5943	[1872, 2318]
163	[323, 324]	2090	[3330, 3331]	4017	[5326, 1011]	5944	[6797, 6798]
164	[325, 326]	2091	[3332, 3333]	4018	[3035, 5327]	5945	[2165, 6799]
165	[327, 328]	2092	[3334, 3335]	4019	[5328, 5329]	5946	[4097, 6564]
166	[329, 330]	2093	[3336, 457]	4020	[2756, 5330]	5947	[2354, 6800]
167	[331, 332]	2094	[3337, 3338]	4021	[1183, 3230]	5948	[4835, 5070]
168	[333, 334]	2095	[3339, 3340]	4022	[2999, 5331]	5949	[4328, 4012]
169	[335, 336]	2096	[3341, 3342]	4023	[5332, 5333]	5950	[608, 4579]
170	[337, 338]	2097	[3343, 327]	4024	[5334, 937]	5951	[6801, 1938]
171	[339, 340]	2098	[3344, 3345]	4025	[5335, 2705]	5952	[6802, 4174]
172	[341, 342]	2099	[409, 3346]	4026	[5336, 2948]	5953	[2194, 6803]

173	[343, 344]	2100	[2768, 3347]	4027	[1190, 5270]	5954	[6804, 898]
174	[345, 346]	2101	[3348, 3349]	4028	[5337, 5338]	5955	[6509, 4260]
175	[347, 348]	2102	[3350, 3351]	4029	[2629, 5339]	5956	[6805, 1798]
176	[349, 350]	2103	[3352, 2737]	4030	[1401, 2921]	5957	[6806, 6807]
177	[351, 352]	2104	[3353, 3307]	4031	[3843, 5340]	5958	[6808, 6809]
178	[353, 354]	2105	[3328, 996]	4032	[3248, 911]	5959	[4858, 4355]
179	[355, 356]	2106	[3140, 3354]	4033	[1045, 3004]	5960	[6810, 2499]
180	[357, 358]	2107	[3355, 3356]	4034	[1529, 2805]	5961	[4107, 3956]
181	[359, 360]	2108	[3357, 1548]	4035	[5341, 5342]	5962	[538, 4055]
182	[361, 362]	2109	[3358, 3257]	4036	[5343, 3722]	5963	[2159, 4276]
183	[363, 364]	2110	[2684, 3056]	4037	[5292, 290]	5964	[4631, 4139]
184	[365, 366]	2111	[3359, 1309]	4038	[3426, 3019]	5965	[6811, 6585]
185	[367, 368]	2112	[3360, 1456]	4039	[5344, 5345]	5966	[6812, 1872]
186	[369, 370]	2113	[3361, 3362]	4040	[5346, 5347]	5967	[4961, 5233]
187	[371, 372]	2114	[3363, 3364]	4041	[5348, 478]	5968	[2052, 5102]
188	[373, 374]	2115	[2612, 3365]	4042	[3210, 3368]	5969	[2000, 6542]
189	[375, 376]	2116	[1401, 3366]	4043	[5349, 5350]	5970	[131, 1870]
190	[377, 378]	2117	[3367, 3368]	4044	[5351, 3021]	5971	[2198, 2205]
191	[379, 380]	2118	[3369, 1096]	4045	[3124, 5352]	5972	[2351, 497]
192	[381, 382]	2119	[28, 1284]	4046	[1285, 1545]	5973	[4266, 4978]
193	[383, 384]	2120	[3370, 3371]	4047	[5353, 1592]	5974	[1909, 5183]
194	[385, 386]	2121	[3372, 3101]	4048	[5354, 3734]	5975	[2178, 2419]
195	[387, 388]	2122	[3373, 3374]	4049	[5355, 5356]	5976	[781, 6796]
196	[389, 390]	2123	[3375, 80]	4050	[1178, 1197]	5977	[1879, 6813]
197	[391, 392]	2124	[3376, 3222]	4051	[5357, 3422]	5978	[3994, 1698]
198	[393, 394]	2125	[3377, 432]	4052	[5358, 5359]	5979	[6481, 6814]
199	[395, 396]	2126	[3378, 3304]	4053	[3503, 5360]	5980	[837, 6617]
200	[397, 398]	2127	[3379, 906]	4054	[3306, 5361]	5981	[4925, 5220]
201	[399, 400]	2128	[350, 3380]	4055	[3581, 5362]	5982	[706, 4738]
202	[401, 402]	2129	[3381, 3382]	4056	[3665, 1430]	5983	[4407, 6815]
203	[403, 404]	2130	[3383, 3384]	4057	[5363, 81]	5984	[6816, 4858]
204	[405, 406]	2131	[3385, 3386]	4058	[3729, 3230]	5985	[5198, 6817]
205	[407, 408]	2132	[83, 1183]	4059	[321, 5364]	5986	[2541, 6818]
206	[409, 410]	2133	[3387, 3388]	4060	[5365, 2741]	5987	[4836, 2010]
207	[411, 412]	2134	[2656, 3389]	4061	[5366, 5367]	5988	[6819, 6609]
208	[413, 414]	2135	[1130, 3390]	4062	[3070, 5368]	5989	[6820, 2033]
209	[415, 416]	2136	[2770, 2879]	4063	[3871, 3711]	5990	[2281, 6821]
210	[417, 418]	2137	[1147, 3391]	4064	[5369, 5370]	5991	[2473, 4410]
211	[419, 420]	2138	[3392, 3393]	4065	[5371, 5372]	5992	[1784, 4942]
212	[421, 422]	2139	[3394, 3394]	4066	[927, 5373]	5993	[6822, 2308]
213	[368, 423]	2140	[3395, 3190]	4067	[5374, 3553]	5994	[8, 6421]
214	[424, 425]	2141	[3396, 3397]	4068	[5375, 1039]	5995	[6523, 2609]
215	[426, 427]	2142	[3398, 3399]	4069	[1337, 1004]	5996	[2017, 6823]
216	[428, 429]	2143	[3400, 2656]	4070	[5376, 3949]	5997	[2459, 2187]

217	[430, 431]	2144	[3401, 2856]	4071	[5377, 5378]	5998	[6824, 2217]
218	[432, 433]	2145	[3005, 1590]	4072	[5379, 5380]	5999	[6825, 5246]
219	[258, 434]	2146	[3402, 3403]	4073	[1246, 5381]	6000	[6826, 6462]
220	[435, 436]	2147	[925, 102]	4074	[1076, 1519]	6001	[6596, 1970]
221	[437, 438]	2148	[3404, 3405]	4075	[2652, 5382]	6002	[2489, 5020]
222	[439, 440]	2149	[3406, 1324]	4076	[5383, 2678]	6003	[6827, 4216]
223	[441, 442]	2150	[3407, 297]	4077	[1199, 1176]	6004	[6828, 4168]
224	[443, 444]	2151	[3408, 3409]	4078	[1319, 5384]	6005	[6829, 4588]
225	[445, 446]	2152	[3410, 2634]	4079	[5385, 5386]	6006	[5015, 6830]
226	[447, 448]	2153	[3411, 3412]	4080	[3276, 3854]	6007	[6668, 684]
227	[449, 450]	2154	[477, 3413]	4081	[5387, 3905]	6008	[6831, 6832]
228	[451, 452]	2155	[3414, 3415]	4082	[340, 1454]	6009	[6833, 6834]
229	[453, 454]	2156	[3416, 3417]	4083	[5388, 1593]	6010	[5149, 1816]
230	[455, 456]	2157	[3418, 3419]	4084	[5389, 5390]	6011	[5194, 638]
231	[457, 458]	2158	[1123, 3420]	4085	[5391, 3002]	6012	[795, 4586]
232	[459, 460]	2159	[995, 3329]	4086	[1438, 1303]	6013	[5138, 2038]
233	[461, 462]	2160	[3421, 3422]	4087	[5392, 3761]	6014	[3988, 4830]
234	[463, 464]	2161	[3423, 3424]	4088	[5393, 5287]	6015	[2188, 4711]
235	[465, 466]	2162	[3425, 3102]	4089	[5394, 1201]	6016	[4223, 6835]
236	[467, 468]	2163	[3426, 1087]	4090	[2965, 2832]	6017	[4622, 553]
237	[469, 470]	2164	[3208, 3427]	4091	[5395, 3848]	6018	[4718, 6836]
238	[471, 472]	2165	[291, 3428]	4092	[3314, 1530]	6019	[855, 4455]
239	[473, 474]	2166	[1265, 427]	4093	[2644, 3796]	6020	[2003, 4904]
240	[475, 476]	2167	[3399, 3429]	4094	[5396, 5397]	6021	[4001, 6837]
241	[477, 478]	2168	[1435, 3430]	4095	[3155, 3834]	6022	[32, 6838]
242	[479, 480]	2169	[2929, 1039]	4096	[3826, 2657]	6023	[6839, 5151]
243	[481, 482]	2170	[3431, 3432]	4097	[3774, 1542]	6024	[4903, 6840]
244	[483, 484]	2171	[3433, 3434]	4098	[5398, 5399]	6025	[4499, 4521]
245	[485, 486]	2172	[3435, 3436]	4099	[1186, 3050]	6026	[1785, 6566]
246	[487, 488]	2173	[3437, 3438]	4100	[3455, 5400]	6027	[6841, 1679]
247	[489, 490]	2174	[3439, 1261]	4101	[3457, 3348]	6028	[6842, 6843]
248	[491, 492]	2175	[3102, 97]	4102	[1413, 5401]	6029	[6610, 1895]
249	[493, 494]	2176	[3440, 3441]	4103	[5402, 71]	6030	[6844, 2226]
250	[495, 496]	2177	[1412, 2821]	4104	[5403, 1374]	6031	[6845, 5160]
251	[497, 498]	2178	[3442, 3443]	4105	[5404, 5405]	6032	[2142, 2166]
252	[499, 500]	2179	[3444, 2853]	4106	[3826, 3389]	6033	[2245, 4387]
253	[501, 502]	2180	[413, 3445]	4107	[1022, 5406]	6034	[6846, 4731]
254	[503, 504]	2181	[3446, 3447]	4108	[5407, 3765]	6035	[2521, 5200]
255	[231, 505]	2182	[1091, 3448]	4109	[5408, 5348]	6036	[4362, 4710]
256	[506, 507]	2183	[476, 3449]	4110	[2734, 26]	6037	[4445, 6601]
257	[508, 509]	2184	[1179, 1198]	4111	[5409, 298]	6038	[2157, 4485]
258	[510, 511]	2185	[3450, 1182]	4112	[5410, 3105]	6039	[2586, 5108]
259	[512, 513]	2186	[3451, 3452]	4113	[1181, 2972]	6040	[4495, 5255]
260	[514, 515]	2187	[3050, 3453]	4114	[5411, 5412]	6041	[6670, 4011]

261	[516, 517]	2188	[6, 3049]	4115	[3395, 5413]	6042	[4524, 2410]
262	[518, 519]	2189	[3454, 3455]	4116	[5414, 2709]	6043	[132, 1871]
263	[520, 521]	2190	[3456, 3457]	4117	[5415, 3072]	6044	[6847, 6848]
264	[522, 523]	2191	[3442, 3458]	4118	[5416, 3861]	6045	[6849, 6692]
265	[524, 525]	2192	[3459, 3460]	4119	[5417, 1025]	6046	[4478, 6840]
266	[526, 527]	2193	[3461, 1166]	4120	[331, 5418]	6047	[4459, 3997]
267	[528, 529]	2194	[3462, 91]	4121	[5419, 2687]	6048	[6686, 6850]
268	[530, 519]	2195	[2964, 1576]	4122	[3084, 5420]	6049	[4336, 6464]
269	[531, 532]	2196	[3463, 456]	4123	[1523, 3487]	6050	[6851, 134]
270	[533, 534]	2197	[3464, 3465]	4124	[1311, 5421]	6051	[6852, 6853]
271	[208, 535]	2198	[1549, 3466]	4125	[5422, 5423]	6052	[4779, 6854]
272	[536, 537]	2199	[3467, 3468]	4126	[1283, 3044]	6053	[6855, 6856]
273	[538, 539]	2200	[2634, 3469]	4127	[2966, 5424]	6054	[6857, 4457]
274	[43, 540]	2201	[3470, 3471]	4128	[5425, 3428]	6055	[2260, 5238]
275	[541, 542]	2202	[377, 3472]	4129	[2747, 1066]	6056	[1699, 757]
276	[543, 544]	2203	[1271, 3473]	4130	[3504, 5426]	6057	[5010, 5072]
277	[545, 546]	2204	[118, 3474]	4131	[5427, 5428]	6058	[4715, 6516]
278	[547, 548]	2205	[334, 3475]	4132	[5429, 5430]	6059	[2471, 6858]
279	[549, 550]	2206	[118, 398]	4133	[5431, 1154]	6060	[6859, 3965]
280	[551, 552]	2207	[3476, 3477]	4134	[3520, 5432]	6061	[6860, 863]
281	[553, 554]	2208	[3478, 3397]	4135	[5433, 1393]	6062	[6861, 6511]
282	[555, 556]	2209	[3479, 391]	4136	[5434, 5435]	6063	[6862, 2241]
283	[557, 558]	2210	[2969, 3480]	4137	[3370, 5436]	6064	[6863, 4329]
284	[559, 560]	2211	[3481, 1280]	4138	[5437, 5438]	6065	[4070, 6864]
285	[530, 561]	2212	[395, 3482]	4139	[5439, 5440]	6066	[4162, 5066]
286	[562, 563]	2213	[3483, 1365]	4140	[2892, 5441]	6067	[1718, 6490]
287	[564, 565]	2214	[3484, 3485]	4141	[3028, 5442]	6068	[2253, 4483]
288	[566, 567]	2215	[3486, 2909]	4142	[3327, 5443]	6069	[6865, 6436]
289	[568, 569]	2216	[3487, 3488]	4143	[5444, 5445]	6070	[6866, 6749]
290	[570, 571]	2217	[3489, 2628]	4144	[5446, 5447]	6071	[2473, 2362]
291	[572, 573]	2218	[3490, 3491]	4145	[5448, 5449]	6072	[6867, 679]
292	[574, 575]	2219	[2746, 3492]	4146	[5450, 5451]	6073	[2112, 5081]
293	[494, 576]	2220	[3493, 3494]	4147	[121, 3532]	6074	[6557, 57]
294	[152, 577]	2221	[3495, 3496]	4148	[5452, 5453]	6075	[4366, 4420]
295	[149, 578]	2222	[3497, 30]	4149	[922, 1494]	6076	[2149, 722]
296	[579, 535]	2223	[3498, 3499]	4150	[5454, 1103]	6077	[4040, 5114]
297	[580, 581]	2224	[2703, 3500]	4151	[5455, 5456]	6078	[698, 6849]
298	[148, 580]	2225	[2635, 3501]	4152	[1098, 5457]	6079	[4126, 2559]
299	[493, 582]	2226	[301, 2956]	4153	[3351, 1579]	6080	[1929, 6506]
300	[583, 152]	2227	[3502, 100]	4154	[1120, 5458]	6081	[5187, 2062]
301	[584, 494]	2228	[1414, 2963]	4155	[3160, 3494]	6082	[4795, 2343]
302	[37, 578]	2229	[3503, 470]	4156	[5459, 1315]	6083	[602, 749]
303	[585, 586]	2230	[3504, 3505]	4157	[3668, 1404]	6084	[4990, 798]
304	[583, 587]	2231	[3506, 3507]	4158	[5460, 3885]	6085	[6868, 500]

305	[588, 589]	2232	[3508, 3509]	4159	[5461, 5462]	6086	[6869, 6870]
306	[590, 591]	2233	[3510, 3511]	4160	[5463, 1171]	6087	[6871, 5158]
307	[592, 593]	2234	[3148, 472]	4161	[5459, 5464]	6088	[1922, 6872]
308	[594, 595]	2235	[3512, 3513]	4162	[5442, 300]	6089	[6873, 6535]
309	[596, 597]	2236	[3031, 301]	4163	[3802, 5465]	6090	[6874, 4776]
310	[598, 599]	2237	[3514, 351]	4164	[5466, 2817]	6091	[6875, 6876]
311	[600, 601]	2238	[3515, 1329]	4165	[3548, 3133]	6092	[2256, 5221]
312	[602, 603]	2239	[1060, 3516]	4166	[5467, 1231]	6093	[1964, 1993]
313	[604, 605]	2240	[3517, 3518]	4167	[3388, 5468]	6094	[6877, 2114]
314	[606, 607]	2241	[3519, 3520]	4168	[868, 3394]	6095	[6878, 2298]
315	[608, 609]	2242	[2644, 3521]	4169	[345, 348]	6096	[6879, 1767]
316	[610, 611]	2243	[3522, 1290]	4170	[5469, 5470]	6097	[6880, 606]
317	[612, 613]	2244	[3523, 909]	4171	[1551, 1122]	6098	[6881, 2121]
318	[614, 615]	2245	[3394, 868]	4172	[3721, 5340]	6099	[6377, 4999]
319	[616, 617]	2246	[353, 1042]	4173	[5471, 5472]	6100	[643, 6882]
320	[529, 618]	2247	[3524, 3525]	4174	[5473, 3468]	6101	[6883, 6884]
321	[175, 619]	2248	[3526, 3153]	4175	[5446, 2703]	6102	[4881, 6885]
322	[620, 621]	2249	[3527, 3528]	4176	[5474, 3209]	6103	[4560, 4851]
323	[622, 623]	2250	[3529, 3530]	4177	[3770, 3485]	6104	[4690, 4976]
324	[624, 625]	2251	[3531, 3532]	4178	[5475, 3819]	6105	[4118, 6886]
325	[59, 626]	2252	[2966, 2837]	4179	[5476, 5477]	6106	[500, 3960]
326	[627, 628]	2253	[3533, 1097]	4180	[1154, 5478]	6107	[6631, 1809]
327	[629, 630]	2254	[3534, 3535]	4181	[963, 5479]	6108	[1611, 2280]
328	[631, 632]	2255	[1090, 3047]	4182	[5480, 5481]	6109	[6887, 810]
329	[633, 634]	2256	[3536, 477]	4183	[2637, 258]	6110	[6382, 2137]
330	[635, 636]	2257	[3537, 3538]	4184	[5482, 5397]	6111	[6888, 6889]
331	[637, 638]	2258	[3539, 3455]	4185	[1548, 5479]	6112	[1690, 2599]
332	[639, 640]	2259	[3540, 3541]	4186	[3408, 5483]	6113	[4801, 3985]
333	[641, 642]	2260	[3542, 2621]	4187	[76, 1034]	6114	[4919, 6443]
334	[229, 643]	2261	[3543, 1086]	4188	[5393, 3335]	6115	[6827, 1715]
335	[644, 645]	2262	[460, 3312]	4189	[5484, 5485]	6116	[6890, 4211]
336	[646, 647]	2263	[3544, 1282]	4190	[3448, 296]	6117	[6891, 6892]
337	[648, 649]	2264	[3545, 3546]	4191	[5452, 5486]	6118	[4620, 4134]
338	[650, 651]	2265	[1535, 3547]	4192	[5487, 65]	6119	[613, 6893]
339	[652, 653]	2266	[3548, 1569]	4193	[5488, 3655]	6120	[6894, 4242]
340	[654, 655]	2267	[3549, 3550]	4194	[5288, 1511]	6121	[4249, 5116]
341	[656, 657]	2268	[3551, 1267]	4195	[5489, 5490]	6122	[5003, 6895]
342	[658, 659]	2269	[3552, 3553]	4196	[5491, 993]	6123	[6437, 4783]
343	[174, 660]	2270	[1444, 3554]	4197	[1228, 1557]	6124	[549, 5179]
344	[661, 662]	2271	[3555, 3556]	4198	[5492, 3562]	6125	[6828, 6896]
345	[663, 664]	2272	[1039, 2964]	4199	[3690, 263]	6126	[6897, 6892]
346	[158, 665]	2273	[3557, 3269]	4200	[5493, 5494]	6127	[4612, 2590]
347	[485, 666]	2274	[931, 3558]	4201	[5495, 5496]	6128	[6898, 6899]
348	[667, 211]	2275	[3559, 121]	4202	[904, 3816]	6129	[4658, 6900]

349	[668, 669]	2276	[3560, 350]	4203	[5497, 1191]	6130	[4104, 4764]
350	[670, 671]	2277	[3561, 3562]	4204	[5498, 5499]	6131	[4123, 1998]
351	[672, 237]	2278	[3563, 3505]	4205	[5500, 3255]	6132	[2582, 4882]
352	[673, 674]	2279	[3564, 3347]	4206	[5501, 5502]	6133	[5253, 6901]
353	[675, 676]	2280	[2618, 3565]	4207	[3377, 3800]	6134	[6902, 4267]
354	[677, 678]	2281	[464, 1337]	4208	[1425, 5503]	6135	[802, 6821]
355	[679, 680]	2282	[3493, 3161]	4209	[5504, 1537]	6136	[6881, 6903]
356	[681, 682]	2283	[3566, 3567]	4210	[5505, 5506]	6137	[4725, 5040]
357	[683, 684]	2284	[3568, 3569]	4211	[999, 3058]	6138	[4638, 6665]
358	[685, 686]	2285	[3475, 3570]	4212	[5491, 1343]	6139	[551, 6475]
359	[687, 688]	2286	[3571, 3572]	4213	[5507, 5508]	6140	[3961, 4967]
360	[689, 690]	2287	[3214, 3273]	4214	[2673, 106]	6141	[2581, 4175]
361	[691, 692]	2288	[1030, 3573]	4215	[2955, 302]	6142	[6904, 6905]
362	[693, 694]	2289	[3574, 3575]	4216	[5509, 5432]	6143	[4946, 4232]
363	[695, 696]	2290	[3576, 2734]	4217	[5510, 5511]	6144	[670, 6447]
364	[697, 698]	2291	[3577, 3080]	4218	[414, 3566]	6145	[6810, 2396]
365	[699, 700]	2292	[3578, 3579]	4219	[5512, 1507]	6146	[6906, 5213]
366	[701, 128]	2293	[86, 3580]	4220	[3802, 5513]	6147	[6907, 6908]
367	[702, 703]	2294	[3581, 3582]	4221	[5514, 5515]	6148	[1694, 5192]
368	[704, 705]	2295	[3583, 3584]	4222	[3557, 27]	6149	[6909, 4535]
369	[706, 707]	2296	[1128, 3585]	4223	[5516, 984]	6150	[4424, 6910]
370	[708, 48]	2297	[1403, 3586]	4224	[5517, 5518]	6151	[6911, 6537]
371	[709, 710]	2298	[3587, 377]	4225	[5519, 1268]	6152	[5017, 2365]
372	[711, 712]	2299	[3588, 3589]	4226	[2768, 5520]	6153	[5247, 1836]
373	[713, 714]	2300	[3590, 1539]	4227	[3275, 5316]	6154	[5091, 1640]
374	[553, 715]	2301	[3591, 3592]	4228	[5521, 982]	6155	[2284, 4374]
375	[716, 717]	2302	[3593, 3594]	4229	[5522, 3095]	6156	[6556, 901]
376	[718, 719]	2303	[3595, 3596]	4230	[3937, 3411]	6157	[6672, 6912]
377	[720, 721]	2304	[3597, 3598]	4231	[5523, 5524]	6158	[2470, 1669]
378	[722, 723]	2305	[3599, 1527]	4232	[5525, 5526]	6159	[6545, 6711]
379	[724, 725]	2306	[3600, 3234]	4233	[3828, 3621]	6160	[2129, 1751]
380	[129, 726]	2307	[3601, 1218]	4234	[5527, 3934]	6161	[4034, 5178]
381	[727, 728]	2308	[3602, 2667]	4235	[3939, 5334]	6162	[1777, 2238]
382	[729, 730]	2309	[1539, 2970]	4236	[5528, 5446]	6163	[4005, 6913]
383	[731, 732]	2310	[3603, 1369]	4237	[5529, 3202]	6164	[4623, 5236]
384	[733, 734]	2311	[3604, 3605]	4238	[5530, 5531]	6165	[4367, 796]
385	[735, 736]	2312	[3606, 1451]	4239	[3639, 474]	6166	[6894, 717]
386	[737, 738]	2313	[3322, 3607]	4240	[5532, 2872]	6167	[735, 1704]
387	[739, 740]	2314	[3608, 3609]	4241	[5533, 1482]	6168	[6806, 6591]
388	[741, 742]	2315	[3610, 3611]	4242	[3060, 1543]	6169	[722, 5140]
389	[743, 744]	2316	[3612, 2844]	4243	[5534, 2685]	6170	[695, 6764]
390	[745, 746]	2317	[3613, 2904]	4244	[2905, 258]	6171	[1711, 4597]
391	[730, 747]	2318	[3614, 1048]	4245	[5535, 3739]	6172	[6530, 6914]
392	[748, 749]	2319	[3252, 3615]	4246	[5536, 5537]	6173	[6388, 6915]

393	[750, 751]	2320	[3616, 1249]	4247	[5538, 5539]	6174	[4469, 4204]
394	[752, 753]	2321	[2647, 458]	4248	[5540, 5541]	6175	[561, 6916]
395	[754, 755]	2322	[3617, 3371]	4249	[1474, 5542]	6176	[5219, 4957]
396	[497, 161]	2323	[3618, 1156]	4250	[5543, 3184]	6177	[4673, 6657]
397	[756, 757]	2324	[3619, 1331]	4251	[2715, 2870]	6178	[4056, 6917]
398	[745, 758]	2325	[3620, 3621]	4252	[5544, 2658]	6179	[6628, 2349]
399	[759, 671]	2326	[1498, 3622]	4253	[5545, 2883]	6180	[2357, 6918]
400	[760, 761]	2327	[3623, 422]	4254	[5546, 5297]	6181	[1834, 4996]
401	[762, 763]	2328	[322, 3624]	4255	[5547, 1599]	6182	[6673, 2222]
402	[764, 765]	2329	[3625, 2963]	4256	[5548, 1179]	6183	[5251, 6759]
403	[766, 767]	2330	[3626, 1346]	4257	[2779, 2834]	6184	[4240, 6919]
404	[768, 769]	2331	[3627, 3628]	4258	[5549, 5550]	6185	[6571, 6920]
405	[770, 771]	2332	[3629, 3630]	4259	[5551, 965]	6186	[6553, 6687]
406	[772, 773]	2333	[2975, 2990]	4260	[1450, 5552]	6187	[822, 1608]
407	[774, 775]	2334	[3631, 3632]	4261	[96, 3103]	6188	[834, 6921]
408	[776, 777]	2335	[3633, 3634]	4262	[285, 5553]	6189	[1782, 6879]
409	[778, 779]	2336	[3635, 3636]	4263	[5554, 1111]	6190	[2474, 6922]
410	[780, 781]	2337	[3637, 3016]	4264	[5555, 5556]	6191	[4145, 5089]
411	[782, 783]	2338	[1267, 3638]	4265	[5557, 5558]	6192	[1963, 2290]
412	[784, 785]	2339	[3639, 3640]	4266	[3690, 5559]	6193	[4935, 6710]
413	[587, 577]	2340	[3641, 440]	4267	[4, 5560]	6194	[4404, 602]
414	[580, 786]	2341	[3642, 3643]	4268	[3724, 5561]	6195	[4837, 2516]
415	[787, 788]	2342	[3644, 3645]	4269	[5562, 5563]	6196	[5174, 4817]
416	[209, 789]	2343	[3646, 1053]	4270	[5312, 5564]	6197	[3967, 6619]
417	[790, 791]	2344	[3647, 3648]	4271	[5565, 5566]	6198	[746, 6923]
418	[598, 792]	2345	[3649, 3650]	4272	[5567, 5568]	6199	[4473, 4895]
419	[793, 794]	2346	[3651, 3652]	4273	[5569, 3723]	6200	[1739, 6924]
420	[795, 796]	2347	[245, 3653]	4274	[1332, 5570]	6201	[6925, 4335]
421	[612, 797]	2348	[252, 3654]	4275	[3156, 5571]	6202	[6926, 6734]
422	[798, 799]	2349	[3655, 1203]	4276	[5572, 5573]	6203	[4575, 6927]
423	[703, 800]	2350	[3656, 3657]	4277	[1213, 5574]	6204	[891, 4603]
424	[768, 801]	2351	[3658, 3659]	4278	[5575, 3160]	6205	[6491, 6928]
425	[802, 803]	2352	[3660, 3661]	4279	[5576, 3181]	6206	[6849, 5074]
426	[804, 805]	2353	[3662, 3663]	4280	[5577, 3830]	6207	[4197, 6929]
427	[806, 807]	2354	[2902, 3664]	4281	[5578, 3354]	6208	[6930, 2579]
428	[808, 809]	2355	[3665, 3666]	4282	[3721, 3844]	6209	[6931, 1668]
429	[810, 811]	2356	[1545, 3274]	4283	[5579, 3495]	6210	[2195, 2206]
430	[812, 813]	2357	[3667, 1249]	4284	[1410, 3319]	6211	[6932, 6534]
431	[814, 815]	2358	[3220, 1134]	4285	[5580, 5581]	6212	[5188, 2301]
432	[816, 817]	2359	[3668, 3586]	4286	[5582, 5583]	6213	[6933, 6934]
433	[818, 217]	2360	[3669, 3325]	4287	[5584, 5585]	6214	[4844, 6695]
434	[819, 820]	2361	[1389, 1209]	4288	[5586, 5587]	6215	[4025, 4913]
435	[821, 605]	2362	[433, 3670]	4289	[479, 2937]	6216	[6935, 5004]
436	[822, 706]	2363	[3671, 3672]	4290	[5588, 5336]	6217	[6936, 6937]

437	[823, 824]	2364	[2913, 3673]	4291	[5589, 3405]	6218	[1731, 6705]
438	[825, 826]	2365	[3674, 3675]	4292	[5590, 3214]	6219	[2139, 4421]
439	[555, 573]	2366	[2771, 3136]	4293	[3353, 5361]	6220	[6938, 4008]
440	[827, 828]	2367	[3068, 3671]	4294	[5591, 1001]	6221	[6939, 4680]
441	[829, 830]	2368	[3676, 988]	4295	[5592, 2839]	6222	[1904, 6940]
442	[831, 832]	2369	[3677, 3298]	4296	[5593, 5594]	6223	[6541, 4199]
443	[787, 833]	2370	[3678, 3679]	4297	[5595, 5596]	6224	[2004, 6941]
444	[834, 835]	2371	[942, 3680]	4298	[5597, 5598]	6225	[2519, 4160]
445	[836, 837]	2372	[3681, 3682]	4299	[5599, 3845]	6226	[153, 149]
446	[838, 197]	2373	[3683, 1244]	4300	[1024, 5600]	6227	[6942, 4325]
447	[839, 840]	2374	[3684, 3685]	4301	[2709, 5601]	6228	[6589, 4434]
448	[841, 842]	2375	[3686, 3229]	4302	[5602, 2768]	6229	[1836, 6943]
449	[843, 844]	2376	[1532, 2864]	4303	[5603, 3848]	6230	[626, 2198]
450	[845, 846]	2377	[3687, 3688]	4304	[1544, 1286]	6231	[4867, 2436]
451	[847, 848]	2378	[3689, 3690]	4305	[1041, 354]	6232	[6944, 2271]
452	[849, 850]	2379	[1545, 3691]	4306	[5604, 992]	6233	[6945, 6946]
453	[851, 852]	2380	[2766, 3301]	4307	[988, 466]	6234	[6618, 4114]
454	[853, 61]	2381	[3692, 3226]	4308	[966, 5605]	6235	[4185, 2249]
455	[854, 855]	2382	[3693, 3694]	4309	[5606, 1006]	6236	[1707, 4696]
456	[856, 857]	2383	[3695, 3696]	4310	[5607, 5608]	6237	[6947, 4463]
457	[858, 859]	2384	[3697, 1445]	4311	[5609, 3868]	6238	[6948, 2308]
458	[860, 861]	2385	[417, 3698]	4312	[5610, 3172]	6239	[1931, 6949]
459	[862, 488]	2386	[3699, 3700]	4313	[1068, 5611]	6240	[6950, 813]
460	[863, 864]	2387	[3701, 3702]	4314	[5612, 1133]	6241	[6951, 6915]
461	[865, 866]	2388	[3703, 986]	4315	[5613, 5614]	6242	[6952, 636]
462	[867, 868]	2389	[3704, 3705]	4316	[3267, 5615]	6243	[4587, 6953]
463	[869, 870]	2390	[3706, 3707]	4317	[5616, 5483]	6244	[6426, 6954]
464	[871, 872]	2391	[3708, 992]	4318	[979, 5617]	6245	[4839, 626]
465	[873, 874]	2392	[3709, 3710]	4319	[3672, 5618]	6246	[136, 6955]
466	[508, 521]	2393	[109, 3711]	4320	[457, 2992]	6247	[4187, 2172]
467	[875, 876]	2394	[2886, 3712]	4321	[5619, 5620]	6248	[3990, 1850]
468	[877, 878]	2395	[3713, 3714]	4322	[5621, 3630]	6249	[4840, 4788]
469	[622, 879]	2396	[3715, 3550]	4323	[5338, 5622]	6250	[4110, 1922]
470	[880, 881]	2397	[3627, 2943]	4324	[116, 334]	6251	[6956, 2330]
471	[882, 187]	2398	[1576, 3170]	4325	[5623, 1352]	6252	[6957, 5235]
472	[883, 884]	2399	[1535, 3340]	4326	[5624, 5625]	6253	[6743, 653]
473	[885, 886]	2400	[3716, 2865]	4327	[5626, 5385]	6254	[4822, 5026]
474	[887, 888]	2401	[435, 3717]	4328	[1175, 5627]	6255	[4883, 5091]
475	[889, 890]	2402	[3718, 3146]	4329	[5628, 1499]	6256	[4303, 6958]
476	[891, 892]	2403	[3719, 3520]	4330	[5629, 5630]	6257	[6959, 2500]
477	[893, 894]	2404	[1531, 3720]	4331	[3800, 5631]	6258	[678, 6960]
478	[656, 895]	2405	[3474, 3721]	4332	[5409, 2771]	6259	[6961, 6962]
479	[896, 897]	2406	[3722, 3723]	4333	[5632, 3731]	6260	[4549, 3965]
480	[898, 712]	2407	[254, 1318]	4334	[5633, 3584]	6261	[1828, 4229]

481	[899, 900]	2408	[3724, 3725]	4335	[5634, 5635]	6262	[2529, 624]
482	[901, 902]	2409	[3726, 3399]	4336	[5636, 3947]	6263	[6963, 4780]
483	[903, 904]	2410	[1288, 3727]	4337	[5637, 5638]	6264	[6964, 6901]
484	[905, 906]	2411	[3728, 1505]	4338	[5639, 5352]	6265	[5162, 6965]
485	[907, 387]	2412	[3729, 1184]	4339	[2654, 5267]	6266	[6841, 1624]
486	[908, 909]	2413	[3730, 3731]	4340	[5640, 2689]	6267	[6731, 6966]
487	[910, 911]	2414	[3158, 3324]	4341	[5641, 5642]	6268	[6704, 6432]
488	[912, 913]	2415	[3732, 3360]	4342	[2794, 3362]	6269	[6967, 1775]
489	[914, 915]	2416	[3733, 3734]	4343	[5643, 5644]	6270	[5164, 6964]
490	[916, 917]	2417	[3735, 266]	4344	[5645, 5646]	6271	[499, 3959]
491	[918, 95]	2418	[3736, 3588]	4345	[1422, 1359]	6272	[1808, 6968]
492	[919, 920]	2419	[3737, 1406]	4346	[5647, 5648]	6273	[6969, 6853]
493	[921, 922]	2420	[303, 2790]	4347	[3720, 5649]	6274	[2418, 2179]
494	[77, 923]	2421	[3738, 3739]	4348	[3564, 5520]	6275	[6470, 6970]
495	[924, 925]	2422	[3740, 3741]	4349	[5650, 5413]	6276	[6702, 4314]
496	[926, 927]	2423	[3742, 2868]	4350	[5651, 3172]	6277	[6536, 6971]
497	[928, 929]	2424	[3743, 3744]	4351	[3244, 5652]	6278	[5211, 1765]
498	[930, 931]	2425	[3745, 3746]	4352	[5653, 5654]	6279	[6972, 1667]
499	[932, 933]	2426	[1296, 951]	4353	[2850, 5655]	6280	[6687, 9]
500	[934, 935]	2427	[3218, 1389]	4354	[3900, 2655]	6281	[4437, 6973]
501	[936, 937]	2428	[3747, 3748]	4355	[5467, 971]	6282	[1608, 4738]
502	[938, 939]	2429	[2942, 3628]	4356	[5656, 3376]	6283	[4791, 6974]
503	[940, 457]	2430	[1241, 420]	4357	[3574, 5657]	6284	[6667, 760]
504	[941, 942]	2431	[2858, 3749]	4358	[5658, 5659]	6285	[6975, 567]
505	[943, 944]	2432	[3750, 3751]	4359	[5660, 5661]	6286	[6595, 6896]
506	[945, 946]	2433	[1355, 3752]	4360	[5377, 5662]	6287	[6976, 4213]
507	[947, 948]	2434	[3753, 3754]	4361	[3024, 5663]	6288	[6977, 6978]
508	[949, 950]	2435	[3169, 1577]	4362	[5664, 5665]	6289	[4630, 4069]
509	[951, 952]	2436	[3116, 3755]	4363	[120, 1061]	6290	[6479, 1720]
510	[70, 953]	2437	[3756, 3757]	4364	[5666, 5667]	6291	[160, 498]
511	[954, 955]	2438	[1546, 2762]	4365	[5668, 3580]	6292	[6979, 569]
512	[956, 957]	2439	[3758, 1131]	4366	[3699, 406]	6293	[4811, 48]
513	[958, 959]	2440	[3759, 3665]	4367	[5669, 3224]	6294	[2107, 1982]
514	[960, 961]	2441	[3760, 3761]	4368	[5584, 5670]	6295	[1803, 2354]
515	[962, 963]	2442	[3762, 3763]	4369	[1165, 5671]	6296	[2041, 4852]
516	[964, 965]	2443	[3070, 1073]	4370	[1487, 935]	6297	[5167, 6573]
517	[966, 967]	2444	[3764, 3765]	4371	[2616, 1216]	6298	[6980, 229]
518	[968, 969]	2445	[3766, 3376]	4372	[5672, 2813]	6299	[4184, 2248]
519	[970, 971]	2446	[3767, 3768]	4373	[5673, 3396]	6300	[1959, 6719]
520	[972, 973]	2447	[3769, 265]	4374	[5674, 5675]	6301	[6642, 6965]
521	[974, 975]	2448	[3770, 3771]	4375	[5676, 1357]	6302	[2413, 1904]
522	[976, 267]	2449	[3772, 3773]	4376	[5677, 5678]	6303	[6873, 4922]
523	[977, 978]	2450	[3774, 3060]	4377	[5679, 5322]	6304	[4708, 5090]
524	[979, 980]	2451	[3775, 3776]	4378	[5680, 5681]	6305	[4582, 2365]

525	[981, 982]	2452	[3777, 3778]	4379	[5671, 3907]	6306	[1914, 2366]
526	[983, 984]	2453	[3779, 3780]	4380	[328, 1005]	6307	[4349, 2107]
527	[985, 986]	2454	[3781, 2915]	4381	[5682, 3382]	6308	[6981, 6634]
528	[987, 988]	2455	[1006, 3782]	4382	[1038, 5363]	6309	[1723, 1747]
529	[989, 990]	2456	[1106, 3783]	4383	[111, 5683]	6310	[4400, 4245]
530	[924, 991]	2457	[3784, 1476]	4384	[5684, 5685]	6311	[6563, 1725]
531	[992, 993]	2458	[3785, 3121]	4385	[2803, 5510]	6312	[1742, 4024]
532	[976, 994]	2459	[3786, 3787]	4386	[5686, 476]	6313	[6982, 6983]
533	[995, 996]	2460	[3788, 1443]	4387	[348, 5687]	6314	[2540, 5080]
534	[997, 998]	2461	[3789, 3790]	4388	[5688, 5689]	6315	[6984, 3996]
535	[999, 1000]	2462	[3791, 913]	4389	[3682, 5690]	6316	[6951, 6389]
536	[1001, 1002]	2463	[3792, 3793]	4390	[5691, 5692]	6317	[6867, 1765]
537	[1003, 1004]	2464	[3794, 3088]	4391	[3667, 2932]	6318	[4858, 6788]
538	[392, 1005]	2465	[2936, 1363]	4392	[5693, 3891]	6319	[4703, 2213]
539	[1006, 1007]	2466	[3795, 3796]	4393	[5413, 3191]	6320	[6985, 6986]
540	[1008, 1009]	2467	[3797, 2900]	4394	[5694, 5695]	6321	[2166, 4278]
541	[1010, 1011]	2468	[3031, 2955]	4395	[1105, 2732]	6322	[6770, 4051]
542	[1012, 1013]	2469	[2856, 3311]	4396	[5316, 5696]	6323	[5197, 4340]
543	[1014, 1015]	2470	[3798, 1352]	4397	[5697, 1059]	6324	[1769, 6713]
544	[1016, 1017]	2471	[2754, 3799]	4398	[2764, 3424]	6325	[2340, 6850]
545	[1018, 1019]	2472	[3800, 433]	4399	[2832, 2837]	6326	[6883, 4927]
546	[1020, 1021]	2473	[3801, 2652]	4400	[2670, 5698]	6327	[13, 4253]
547	[1022, 1023]	2474	[28, 3044]	4401	[5699, 5700]	6328	[6513, 1892]
548	[1024, 1025]	2475	[2977, 3802]	4402	[5701, 3569]	6329	[2433, 6681]
549	[1026, 1027]	2476	[1563, 2738]	4403	[1551, 23]	6330	[594, 6813]
550	[1028, 1029]	2477	[3803, 3804]	4404	[1005, 2712]	6331	[6987, 4986]
551	[926, 1030]	2478	[3805, 3806]	4405	[5702, 1069]	6332	[4109, 210]
552	[1031, 1032]	2479	[3807, 96]	4406	[5703, 3241]	6333	[1940, 623]
553	[1033, 1034]	2480	[3808, 3714]	4407	[5704, 3193]	6334	[6988, 5098]
554	[1035, 1036]	2481	[2983, 3809]	4408	[5705, 5420]	6335	[2427, 760]
555	[1037, 1038]	2482	[3810, 3811]	4409	[5706, 3155]	6336	[4850, 4561]
556	[1039, 1040]	2483	[3812, 1515]	4410	[5707, 5708]	6337	[6878, 541]
557	[1041, 1042]	2484	[1169, 3327]	4411	[5709, 5710]	6338	[737, 6958]
558	[1043, 1044]	2485	[3215, 2807]	4412	[2836, 5711]	6339	[6989, 6990]
559	[1045, 1046]	2486	[3772, 3813]	4413	[1306, 2954]	6340	[1957, 6701]
560	[1047, 1048]	2487	[3814, 3815]	4414	[3201, 5712]	6341	[5032, 124]
561	[1049, 1050]	2488	[1235, 3816]	4415	[5713, 5714]	6342	[6889, 6739]
562	[367, 1051]	2489	[3817, 3818]	4416	[5715, 5716]	6343	[2223, 6991]
563	[1052, 1053]	2490	[3819, 3471]	4417	[5717, 2635]	6344	[6992, 6993]
564	[1054, 1055]	2491	[3820, 3284]	4418	[5718, 5622]	6345	[4648, 6994]
565	[1056, 1057]	2492	[3821, 3822]	4419	[3612, 451]	6346	[669, 4666]
566	[1058, 1059]	2493	[3823, 3346]	4420	[451, 2845]	6347	[5129, 4423]
567	[1060, 1061]	2494	[3824, 3825]	4421	[3393, 5719]	6348	[2207, 6659]
568	[1062, 1063]	2495	[3636, 3281]	4422	[2830, 1472]	6349	[4267, 4635]

569	[1064, 1065]	2496	[3572, 2843]	4423	[5720, 5721]	6350	[1625, 159]
570	[994, 319]	2497	[3400, 3826]	4424	[3403, 2981]	6351	[6995, 2586]
571	[1066, 1067]	2498	[3827, 2866]	4425	[5678, 3098]	6352	[6647, 4895]
572	[1068, 1069]	2499	[1402, 3828]	4426	[5722, 3815]	6353	[6996, 4557]
573	[1070, 1071]	2500	[3829, 3830]	4427	[5723, 5724]	6354	[6997, 6998]
574	[1072, 1073]	2501	[1320, 3831]	4428	[5725, 5726]	6355	[6850, 6999]
575	[1074, 1075]	2502	[3832, 3833]	4429	[117, 397]	6356	[166, 6924]
576	[1076, 1077]	2503	[3834, 3835]	4430	[265, 5727]	6357	[5146, 4961]
577	[462, 1078]	2504	[1341, 976]	4431	[1090, 5728]	6358	[1818, 6991]
578	[304, 1079]	2505	[3836, 3837]	4432	[5729, 1429]	6359	[4926, 6884]
579	[443, 1080]	2506	[1217, 3838]	4433	[5730, 5731]	6360	[7000, 6493]
580	[249, 1081]	2507	[3839, 3840]	4434	[5732, 995]	6361	[4366, 2091]
581	[1082, 297]	2508	[3491, 1135]	4435	[3229, 5536]	6362	[4199, 5154]
582	[1083, 1084]	2509	[3460, 3841]	4436	[5733, 3632]	6363	[5009, 5071]
583	[1085, 1086]	2510	[3842, 3040]	4437	[5734, 2891]	6364	[4545, 6734]
584	[296, 1087]	2511	[3843, 3844]	4438	[2815, 2790]	6365	[6757, 6673]
585	[922, 1088]	2512	[3845, 3846]	4439	[5735, 2978]	6366	[2468, 4214]
586	[1089, 1090]	2513	[2633, 3847]	4440	[5736, 3163]	6367	[7001, 6794]
587	[1091, 105]	2514	[3848, 3849]	4441	[3046, 5728]	6368	[1656, 2580]
588	[319, 1092]	2515	[3850, 3652]	4442	[5737, 5620]	6369	[4737, 5153]
589	[1093, 1094]	2516	[1286, 3691]	4443	[3497, 5738]	6370	[7002, 6798]
590	[1095, 1096]	2517	[3577, 3851]	4444	[5739, 5740]	6371	[4192, 7003]
591	[1097, 1098]	2518	[3294, 1211]	4445	[368, 2697]	6372	[4503, 4128]
592	[1099, 1100]	2519	[3852, 1542]	4446	[5741, 2831]	6373	[7004, 3658]
593	[1101, 424]	2520	[3410, 1563]	4447	[2682, 3074]	6374	[5911, 5895]
594	[1102, 1103]	2521	[3853, 1327]	4448	[5742, 5743]	6375	[5369, 5955]
595	[1104, 1105]	2522	[3854, 3855]	4449	[5744, 5271]	6376	[7005, 2702]
596	[1106, 1107]	2523	[3856, 3857]	4450	[304, 2791]	6377	[927, 3573]
597	[1108, 1109]	2524	[3858, 3859]	4451	[24, 1594]	6378	[5717, 1310]
598	[1110, 1111]	2525	[3860, 3861]	4452	[268, 1225]	6379	[7006, 6092]
599	[1112, 1113]	2526	[3862, 390]	4453	[2950, 5745]	6380	[5785, 6338]
600	[1114, 1115]	2527	[1249, 2933]	4454	[1049, 5746]	6381	[7007, 3585]
601	[1116, 1117]	2528	[3662, 3751]	4455	[5474, 3427]	6382	[7008, 3393]
602	[1118, 1119]	2529	[3823, 410]	4456	[5747, 5748]	6383	[346, 7009]
603	[1120, 1121]	2530	[3863, 1540]	4457	[5749, 5750]	6384	[7010, 7011]
604	[1122, 1123]	2531	[2717, 259]	4458	[327, 392]	6385	[5579, 5764]
605	[1124, 1125]	2532	[3864, 3298]	4459	[3922, 5751]	6386	[5715, 3333]
606	[1126, 1127]	2533	[3865, 3866]	4460	[5752, 5670]	6387	[2619, 3326]
607	[1128, 1129]	2534	[3867, 3055]	4461	[2694, 407]	6388	[1398, 5698]
608	[1130, 1131]	2535	[991, 102]	4462	[5753, 3582]	6389	[7012, 7013]
609	[1132, 1133]	2536	[3476, 3868]	4463	[3030, 5754]	6390	[5879, 3781]
610	[1134, 1135]	2537	[3869, 3870]	4464	[5755, 5756]	6391	[7014, 7015]
611	[1136, 1137]	2538	[1558, 3871]	4465	[5757, 3685]	6392	[7016, 3388]
612	[1138, 20]	2539	[3872, 3873]	4466	[5758, 5510]	6393	[112, 2746]

613	[1139, 1140]	2540	[3134, 3874]	4467	[2996, 275]	6394	[7017, 7018]
614	[1141, 1132]	2541	[3875, 3323]	4468	[5759, 3883]	6395	[6245, 5441]
615	[1142, 1143]	2542	[3876, 399]	4469	[325, 5500]	6396	[5756, 6177]
616	[1144, 1078]	2543	[3877, 3878]	4470	[5760, 5761]	6397	[2978, 5465]
617	[1145, 396]	2544	[3879, 3880]	4471	[3926, 5762]	6398	[2802, 1297]
618	[988, 1146]	2545	[1129, 3881]	4472	[5763, 5764]	6399	[7019, 282]
619	[1147, 1148]	2546	[3298, 3882]	4473	[5765, 3780]	6400	[5473, 7020]
620	[312, 418]	2547	[3092, 3883]	4474	[2649, 5766]	6401	[7021, 7022]
621	[1149, 1150]	2548	[1464, 1000]	4475	[428, 5629]	6402	[2628, 5862]
622	[1151, 1152]	2549	[1186, 2749]	4476	[5767, 5598]	6403	[7023, 7024]
623	[1153, 1154]	2550	[3884, 432]	4477	[5768, 5769]	6404	[7025, 5468]
624	[1155, 1156]	2551	[1062, 3885]	4478	[3012, 916]	6405	[7026, 6144]
625	[1157, 1158]	2552	[3886, 2782]	4479	[5423, 5770]	6406	[2925, 7027]
626	[1159, 1160]	2553	[3887, 322]	4480	[5332, 5771]	6407	[7028, 1227]
627	[1161, 1162]	2554	[3490, 1134]	4481	[5754, 301]	6408	[98, 1409]
628	[1163, 1164]	2555	[910, 3249]	4482	[5764, 3496]	6409	[5668, 87]
629	[1165, 1166]	2556	[3888, 3889]	4483	[3238, 5772]	6410	[5605, 7029]
630	[1167, 920]	2557	[3463, 3048]	4484	[5773, 5774]	6411	[5266, 7030]
631	[1168, 1169]	2558	[3890, 3891]	4485	[1212, 1460]	6412	[6240, 404]
632	[1170, 1171]	2559	[3892, 3893]	4486	[2936, 3906]	6413	[3407, 5409]
633	[1172, 1173]	2560	[3894, 3895]	4487	[5775, 5776]	6414	[3401, 3310]
634	[1174, 1175]	2561	[3896, 3897]	4488	[329, 1119]	6415	[3323, 7031]
635	[1176, 382]	2562	[3898, 3899]	4489	[5777, 5778]	6416	[7032, 5301]
636	[1034, 1177]	2563	[3900, 3901]	4490	[1170, 5779]	6417	[1121, 7033]
637	[1178, 1179]	2564	[3902, 927]	4491	[3042, 5780]	6418	[7034, 7035]
638	[84, 1180]	2565	[1255, 366]	4492	[360, 5781]	6419	[1395, 3480]
639	[1181, 1182]	2566	[3601, 3838]	4493	[5782, 5783]	6420	[3487, 3264]
640	[1183, 1184]	2567	[3903, 2852]	4494	[5784, 5785]	6421	[269, 7036]
641	[1185, 1186]	2568	[3111, 1173]	4495	[3572, 1113]	6422	[3912, 3757]
642	[1187, 1188]	2569	[3904, 3905]	4496	[5786, 3320]	6423	[7037, 3857]
643	[452, 1189]	2570	[1362, 3906]	4497	[2793, 1330]	6424	[5365, 7038]
644	[1190, 1152]	2571	[3907, 3908]	4498	[5787, 5359]	6425	[1363, 7039]
645	[1191, 1192]	2572	[3909, 1186]	4499	[317, 3847]	6426	[7040, 2812]
646	[1193, 1194]	2573	[3910, 3911]	4500	[5788, 3718]	6427	[2832, 5424]
647	[1195, 1196]	2574	[3912, 3913]	4501	[1359, 360]	6428	[7041, 5412]
648	[1197, 1198]	2575	[1257, 3636]	4502	[2930, 1040]	6429	[462, 7042]
649	[1199, 381]	2576	[3914, 3915]	4503	[992, 1343]	6430	[7043, 5700]
650	[1200, 1201]	2577	[3916, 3917]	4504	[5789, 3342]	6431	[471, 3149]
651	[997, 1202]	2578	[3918, 3919]	4505	[907, 3068]	6432	[7044, 942]
652	[1203, 925]	2579	[3450, 2972]	4506	[1360, 5581]	6433	[7045, 2945]
653	[1204, 1205]	2580	[3920, 69]	4507	[5790, 5791]	6434	[3114, 7046]
654	[1206, 1207]	2581	[3063, 3921]	4508	[5626, 2941]	6435	[1040, 1576]
655	[1208, 1209]	2582	[3922, 3923]	4509	[5792, 5793]	6436	[1192, 3878]
656	[1210, 1211]	2583	[2714, 3924]	4510	[5794, 3419]	6437	[1001, 6110]

657	[1212, 1213]	2584	[456, 3925]	4511	[1604, 3302]	6438	[7047, 5831]
658	[1214, 1090]	2585	[3926, 375]	4512	[5795, 1485]	6439	[1021, 7048]
659	[1215, 1216]	2586	[3927, 3928]	4513	[5796, 5797]	6440	[7049, 2960]
660	[1217, 1218]	2587	[89, 3929]	4514	[3263, 3107]	6441	[7050, 7051]
661	[1020, 1219]	2588	[937, 2986]	4515	[3360, 5798]	6442	[5978, 2638]
662	[1220, 1221]	2589	[1394, 3930]	4516	[5799, 5800]	6443	[5835, 3077]
663	[1222, 1223]	2590	[3931, 3932]	4517	[5623, 3064]	6444	[7052, 7053]
664	[1224, 1140]	2591	[3933, 3934]	4518	[1332, 5801]	6445	[1053, 7054]
665	[1225, 1226]	2592	[3935, 3936]	4519	[2632, 5802]	6446	[3064, 7055]
666	[1227, 1228]	2593	[3937, 3449]	4520	[5803, 341]	6447	[3875, 3158]
667	[1229, 1230]	2594	[1326, 3938]	4521	[2736, 5762]	6448	[7056, 3530]
668	[970, 1231]	2595	[3939, 936]	4522	[5804, 5805]	6449	[6002, 7057]
669	[1232, 1233]	2596	[3940, 3941]	4523	[5806, 3551]	6450	[7058, 5669]
670	[1234, 1104]	2597	[95, 3942]	4524	[5807, 5808]	6451	[7059, 7060]
671	[1235, 1236]	2598	[1097, 1597]	4525	[5809, 2936]	6452	[7061, 7062]
672	[1237, 1238]	2599	[3943, 3143]	4526	[5810, 2856]	6453	[7063, 3355]
673	[1239, 1240]	2600	[3477, 3944]	4527	[269, 1226]	6454	[7064, 7065]
674	[1241, 1242]	2601	[985, 3945]	4528	[5405, 1032]	6455	[1392, 7066]
675	[1243, 1244]	2602	[2676, 273]	4529	[1231, 5811]	6456	[7067, 7068]
676	[1245, 1246]	2603	[3946, 1500]	4530	[1518, 1077]	6457	[1043, 7069]
677	[1247, 1248]	2604	[3863, 2970]	4531	[2689, 5812]	6458	[5267, 6163]
678	[1249, 1250]	2605	[1386, 3947]	4532	[5813, 5814]	6459	[3812, 438]
679	[1138, 1251]	2606	[3498, 3321]	4533	[913, 5815]	6460	[5939, 5453]
680	[1252, 351]	2607	[3948, 3949]	4534	[5460, 1063]	6461	[7070, 7071]
681	[1253, 1254]	2608	[2825, 2737]	4535	[3883, 5816]	6462	[5753, 5362]
682	[1255, 1193]	2609	[3950, 3951]	4536	[5817, 5818]	6463	[6148, 5869]
683	[1256, 1257]	2610	[3357, 963]	4537	[3171, 3851]	6464	[7072, 1102]
684	[1258, 1259]	2611	[3952, 3953]	4538	[5819, 110]	6465	[7073, 5618]
685	[1260, 1261]	2612	[3954, 1687]	4539	[2790, 1079]	6466	[7074, 6293]
686	[1262, 1263]	2613	[3955, 3956]	4540	[5820, 2947]	6467	[1317, 6074]
687	[1264, 1265]	2614	[60, 2390]	4541	[5568, 5821]	6468	[2777, 3429]
688	[1266, 255]	2615	[2013, 2083]	4542	[5822, 287]	6469	[6296, 7075]
689	[1267, 1268]	2616	[3957, 3958]	4543	[5823, 3013]	6470	[1552, 5500]
690	[1269, 1270]	2617	[3959, 3960]	4544	[5824, 5825]	6471	[3752, 3727]
691	[1271, 1272]	2618	[524, 628]	4545	[3695, 3880]	6472	[5710, 6045]
692	[1273, 1274]	2619	[3961, 3962]	4546	[5826, 2723]	6473	[101, 6075]
693	[1275, 1065]	2620	[1990, 3963]	4547	[5827, 448]	6474	[5930, 7024]
694	[1276, 1277]	2621	[3964, 2533]	4548	[5287, 5828]	6475	[5588, 1233]
695	[1278, 261]	2622	[3965, 3966]	4549	[2910, 5829]	6476	[401, 2902]
696	[1279, 1280]	2623	[3967, 3968]	4550	[5830, 5831]	6477	[101, 3098]
697	[1281, 1282]	2624	[3969, 815]	4551	[5832, 5833]	6478	[5418, 1402]
698	[1283, 1284]	2625	[3970, 3971]	4552	[5834, 5835]	6479	[432, 5631]
699	[1285, 1286]	2626	[1905, 3972]	4553	[5836, 3131]	6480	[23, 1123]
700	[78, 247]	2627	[2204, 2199]	4554	[5837, 5838]	6481	[1559, 6050]

701	[1287, 1288]	2628	[860, 1746]	4555	[5264, 5839]	6482	[7076, 6062]
702	[1289, 1290]	2629	[3973, 3974]	4556	[5840, 5841]	6483	[5264, 6039]
703	[1291, 1292]	2630	[3975, 3976]	4557	[5564, 5842]	6484	[5499, 7077]
704	[1293, 1294]	2631	[2014, 3977]	4558	[5644, 3177]	6485	[7078, 5517]
705	[1295, 1148]	2632	[3978, 3979]	4559	[2989, 2976]	6486	[2685, 3057]
706	[1296, 1297]	2633	[3980, 3981]	4560	[5843, 5844]	6487	[294, 7079]
707	[1298, 1299]	2634	[1745, 861]	4561	[5845, 5846]	6488	[1453, 2622]
708	[1300, 98]	2635	[3982, 3983]	4562	[3578, 2916]	6489	[3526, 7080]
709	[1057, 1301]	2636	[3984, 3985]	4563	[977, 5847]	6490	[2771, 2651]
710	[1302, 1303]	2637	[727, 3986]	4564	[5848, 3845]	6491	[5589, 7081]
711	[1304, 1305]	2638	[1624, 3987]	4565	[5849, 3356]	6492	[7082, 7083]
712	[1306, 1307]	2639	[3988, 3989]	4566	[3868, 3944]	6493	[248, 5766]
713	[1308, 1219]	2640	[3990, 3991]	4567	[5850, 1237]	6494	[6247, 5605]
714	[1309, 480]	2641	[3992, 3993]	4568	[5851, 2892]	6495	[3745, 955]
715	[1310, 1311]	2642	[3994, 1800]	4569	[5852, 5853]	6496	[2760, 7084]
716	[1312, 1313]	2643	[3995, 3996]	4570	[3445, 3566]	6497	[7085, 3357]
717	[1314, 1315]	2644	[3997, 2008]	4571	[1591, 479]	6498	[1312, 5384]
718	[1316, 1317]	2645	[3998, 3999]	4572	[1161, 5284]	6499	[7086, 2872]
719	[1266, 1318]	2646	[4000, 4001]	4573	[5854, 5855]	6500	[7087, 7088]
720	[1319, 1313]	2647	[4002, 191]	4574	[24, 3420]	6501	[7089, 7090]
721	[1320, 1321]	2648	[4003, 2257]	4575	[3374, 269]	6502	[3593, 5685]
722	[1322, 1323]	2649	[1633, 1880]	4576	[5856, 5857]	6503	[7091, 7092]
723	[1324, 1325]	2650	[1887, 833]	4577	[5858, 3776]	6504	[3250, 6217]
724	[1326, 1327]	2651	[581, 4004]	4578	[3165, 3447]	6505	[3352, 2654]
725	[1328, 1329]	2652	[1952, 3958]	4579	[5859, 5860]	6506	[3091, 446]
726	[1262, 1330]	2653	[522, 776]	4580	[3374, 1225]	6507	[3093, 7093]
727	[1331, 1332]	2654	[2092, 4005]	4581	[5861, 5862]	6508	[3799, 2915]
728	[1333, 1334]	2655	[801, 2116]	4582	[3677, 2788]	6509	[7094, 6038]
729	[292, 1335]	2656	[4006, 1902]	4583	[5863, 1310]	6510	[7095, 7096]
730	[1336, 1337]	2657	[624, 4007]	4584	[2724, 5864]	6511	[5526, 2821]
731	[1338, 1339]	2658	[572, 556]	4585	[5865, 1554]	6512	[6040, 3443]
732	[1171, 1340]	2659	[4008, 4009]	4586	[2749, 3453]	6513	[7097, 3793]
733	[1341, 266]	2660	[855, 2399]	4587	[397, 3474]	6514	[7098, 5570]
734	[289, 1342]	2661	[4010, 4011]	4588	[5866, 5867]	6515	[1378, 7099]
735	[1343, 1344]	2662	[2338, 486]	4589	[5868, 3063]	6516	[7100, 5977]
736	[1345, 1346]	2663	[1758, 4012]	4590	[5869, 2731]	6517	[7101, 7102]
737	[1347, 1348]	2664	[4013, 1967]	4591	[5413, 5870]	6518	[7103, 7104]
738	[1349, 1350]	2665	[4014, 4015]	4592	[5871, 1125]	6519	[7105, 3717]
739	[1351, 980]	2666	[4016, 4017]	4593	[5574, 5872]	6520	[7106, 3438]
740	[1352, 1353]	2667	[1988, 2333]	4594	[3703, 3945]	6521	[3048, 3925]
741	[1354, 1355]	2668	[4018, 4019]	4595	[2706, 1188]	6522	[3297, 1509]
742	[1356, 1357]	2669	[4020, 4021]	4596	[5873, 1431]	6523	[5616, 3409]
743	[1358, 1359]	2670	[4022, 664]	4597	[3492, 5683]	6524	[7107, 3213]
744	[1360, 1361]	2671	[4023, 4024]	4598	[5874, 5518]	6525	[1284, 3045]

745	[1362, 1363]	2672	[1875, 2584]	4599	[3702, 5875]	6526	[347, 346]
746	[1364, 1365]	2673	[185, 212]	4600	[1364, 5876]	6527	[3840, 1055]
747	[1366, 1367]	2674	[2117, 776]	4601	[266, 994]	6528	[3004, 7108]
748	[1368, 454]	2675	[4025, 4026]	4602	[109, 5501]	6529	[7109, 3206]
749	[1369, 1370]	2676	[4027, 59]	4603	[5754, 2955]	6530	[7110, 3457]
750	[1371, 966]	2677	[4028, 4029]	4604	[5877, 3735]	6531	[7111, 7054]
751	[1372, 1373]	2678	[1927, 4030]	4605	[5878, 3846]	6532	[2796, 3194]
752	[1374, 1375]	2679	[1607, 4031]	4606	[5762, 376]	6533	[3417, 6256]
753	[1376, 1377]	2680	[4032, 2146]	4607	[5879, 3799]	6534	[7112, 6344]
754	[1378, 1379]	2681	[711, 4033]	4608	[313, 5493]	6535	[5743, 7027]
755	[1380, 1381]	2682	[4034, 4035]	4609	[5398, 1277]	6536	[3461, 5671]
756	[1355, 1288]	2683	[1620, 4036]	4610	[5672, 306]	6537	[7113, 7114]
757	[1382, 1383]	2684	[2243, 3981]	4611	[5880, 5881]	6538	[3832, 2824]
758	[1384, 1385]	2685	[4037, 2326]	4612	[2751, 5882]	6539	[3929, 3918]
759	[1386, 1387]	2686	[4038, 4039]	4613	[5883, 356]	6540	[7115, 1480]
760	[1388, 1191]	2687	[4040, 1839]	4614	[5272, 2663]	6541	[1588, 5493]
761	[1389, 1390]	2688	[2252, 837]	4615	[5677, 101]	6542	[7116, 2889]
762	[1391, 1392]	2689	[210, 4041]	4616	[1459, 1213]	6543	[6121, 1335]
763	[1393, 1394]	2690	[4042, 4043]	4617	[2804, 5511]	6544	[7117, 6160]
764	[1203, 991]	2691	[4044, 4045]	4618	[3154, 5884]	6545	[7118, 7119]
765	[1395, 1396]	2692	[4046, 2355]	4619	[3009, 5885]	6546	[3929, 2875]
766	[1397, 395]	2693	[1897, 2335]	4620	[5886, 5790]	6547	[3270, 5881]
767	[1398, 1399]	2694	[4047, 4048]	4621	[5868, 5887]	6548	[3894, 3645]
768	[1400, 1401]	2695	[829, 4049]	4622	[5888, 5889]	6549	[1257, 3280]
769	[332, 1402]	2696	[4050, 4051]	4623	[5578, 3141]	6550	[7120, 3748]
770	[1403, 1404]	2697	[4052, 4053]	4624	[5890, 5891]	6551	[113, 1143]
771	[1405, 1406]	2698	[4054, 2389]	4625	[5892, 5893]	6552	[1530, 2806]
772	[1407, 1141]	2699	[2078, 4055]	4626	[3098, 5894]	6553	[1540, 2971]
773	[1408, 1409]	2700	[4056, 4057]	4627	[3701, 5895]	6554	[7121, 5644]
774	[1410, 1411]	2701	[1861, 4058]	4628	[5896, 5897]	6555	[5617, 7122]
775	[1412, 1413]	2702	[4059, 4060]	4629	[1184, 958]	6556	[5921, 1605]
776	[1414, 928]	2703	[2549, 4061]	4630	[5766, 1081]	6557	[3879, 3696]
777	[267, 319]	2704	[2276, 2270]	4631	[5898, 5297]	6558	[3244, 3475]
778	[1415, 1149]	2705	[4062, 4063]	4632	[5899, 386]	6559	[7123, 5943]
779	[1416, 1417]	2706	[4064, 2080]	4633	[5900, 5901]	6560	[7124, 5366]
780	[1418, 1419]	2707	[4065, 4066]	4634	[1035, 5902]	6561	[6303, 6159]
781	[1420, 1421]	2708	[1915, 2367]	4635	[1592, 5903]	6562	[3809, 7125]
782	[1422, 359]	2709	[4067, 177]	4636	[5904, 5905]	6563	[5960, 7099]
783	[1423, 1424]	2710	[4068, 2271]	4637	[5906, 3595]	6564	[7099, 6330]
784	[1425, 1426]	2711	[747, 4069]	4638	[5907, 5908]	6565	[1265, 7126]
785	[1427, 1428]	2712	[4070, 2264]	4639	[3528, 5690]	6566	[1384, 3720]
786	[1299, 1323]	2713	[4059, 4071]	4640	[458, 5909]	6567	[3508, 5317]
787	[1429, 1430]	2714	[816, 4072]	4641	[3794, 2659]	6568	[7127, 1348]
788	[1431, 271]	2715	[574, 1881]	4642	[5910, 2740]	6569	[3067, 387]

789	[1064, 1432]	2716	[4073, 2448]	4643	[5911, 3702]	6570	[6311, 5849]
790	[1433, 1434]	2717	[4074, 1780]	4644	[5912, 417]	6571	[7128, 6349]
791	[1435, 1436]	2718	[689, 4075]	4645	[2940, 5385]	6572	[7129, 6366]
792	[1252, 1437]	2719	[4076, 4077]	4646	[5913, 1401]	6573	[3011, 7130]
793	[1438, 1439]	2720	[4078, 1852]	4647	[2785, 1603]	6574	[3213, 936]
794	[1440, 414]	2721	[4079, 4080]	4648	[3676, 465]	6575	[7131, 5844]
795	[1441, 1442]	2722	[1811, 4081]	4649	[5914, 5915]	6576	[7132, 7133]
796	[430, 1443]	2723	[4082, 4083]	4650	[5916, 1136]	6577	[2680, 7134]
797	[439, 1444]	2724	[4084, 2005]	4651	[5525, 1412]	6578	[5372, 7135]
798	[1290, 1445]	2725	[4085, 1986]	4652	[5797, 3417]	6579	[1021, 6171]
799	[1446, 1447]	2726	[4086, 2527]	4653	[3455, 2842]	6580	[5975, 3027]
800	[1290, 1448]	2727	[4087, 4088]	4654	[3235, 5917]	6581	[7136, 3204]
801	[1449, 310]	2728	[900, 2565]	4655	[5918, 3870]	6582	[467, 5802]
802	[1450, 1451]	2729	[4089, 4090]	4656	[274, 2997]	6583	[7137, 3819]
803	[951, 1452]	2730	[133, 4042]	4657	[3042, 1301]	6584	[3743, 7138]
804	[1453, 1454]	2731	[2112, 714]	4658	[63, 2894]	6585	[7139, 7140]
805	[1455, 1456]	2732	[4091, 2513]	4659	[260, 5919]	6586	[7141, 3151]
806	[1457, 1458]	2733	[4092, 4093]	4660	[284, 1169]	6587	[3846, 7142]
807	[1459, 1460]	2734	[2320, 4086]	4661	[1276, 5399]	6588	[7082, 5608]
808	[1461, 1167]	2735	[4094, 4095]	4662	[1537, 5508]	6589	[7143, 5503]
809	[1329, 1462]	2736	[764, 4096]	4663	[5920, 5661]	6590	[7144, 7145]
810	[1463, 1464]	2737	[4097, 4098]	4664	[5921, 2692]	6591	[7146, 7147]
811	[1465, 944]	2738	[2289, 4099]	4665	[5922, 5923]	6592	[3193, 7062]
812	[1466, 1467]	2739	[4100, 4101]	4666	[5924, 5925]	6593	[7148, 7149]
813	[1468, 424]	2740	[2429, 241]	4667	[5926, 3351]	6594	[1500, 5329]
814	[1469, 1470]	2741	[2067, 4102]	4668	[3280, 5927]	6595	[7150, 7151]
815	[994, 1471]	2742	[4103, 4104]	4669	[5928, 2895]	6596	[7152, 6296]
816	[1472, 1183]	2743	[4105, 4106]	4670	[1351, 5617]	6597	[5553, 5443]
817	[1473, 381]	2744	[4107, 4108]	4671	[5929, 3364]	6598	[7153, 7154]
818	[1474, 1419]	2745	[4109, 667]	4672	[5930, 5931]	6599	[402, 7155]
819	[1475, 1476]	2746	[4110, 874]	4673	[3641, 1444]	6600	[7156, 3415]
820	[1477, 1478]	2747	[4111, 4112]	4674	[5932, 5933]	6601	[2798, 5907]
821	[1479, 1480]	2748	[4113, 4114]	4675	[3123, 5934]	6602	[7157, 6135]
822	[1481, 1482]	2749	[4115, 4116]	4676	[5935, 5936]	6603	[3168, 1351]
823	[385, 1483]	2750	[4117, 41]	4677	[3841, 5937]	6604	[7158, 7159]
824	[1484, 1485]	2751	[4118, 140]	4678	[5888, 5908]	6605	[7160, 1257]
825	[1486, 1487]	2752	[2440, 4119]	4679	[5938, 3374]	6606	[7161, 2776]
826	[1488, 1489]	2753	[4120, 4121]	4680	[3871, 5501]	6607	[3514, 1437]
827	[932, 1490]	2754	[198, 4122]	4681	[5939, 5486]	6608	[7162, 2939]
828	[1491, 1492]	2755	[4123, 2283]	4682	[382, 5936]	6609	[3506, 7163]
829	[1493, 1494]	2756	[2334, 1898]	4683	[475, 3937]	6610	[7164, 6009]
830	[1495, 1496]	2757	[4124, 562]	4684	[5526, 1413]	6611	[5649, 3595]
831	[1497, 1498]	2758	[4125, 1921]	4685	[5940, 5941]	6612	[7165, 7166]
832	[1499, 1500]	2759	[4002, 4126]	4686	[5686, 3937]	6613	[7167, 5855]

833	[1501, 18]	2760	[1680, 2395]	4687	[5942, 5943]	6614	[3080, 7168]
834	[1502, 1240]	2761	[4127, 34]	4688	[5944, 5945]	6615	[291, 7169]
835	[1503, 1504]	2762	[4128, 4129]	4689	[3406, 2718]	6616	[6295, 1538]
836	[66, 1505]	2763	[4130, 2323]	4690	[5946, 5665]	6617	[7110, 7170]
837	[1506, 1507]	2764	[177, 4131]	4691	[1411, 5947]	6618	[272, 2677]
838	[1508, 1509]	2765	[4132, 4133]	4692	[3308, 5902]	6619	[7171, 2624]
839	[1510, 1511]	2766	[4134, 4135]	4693	[249, 2906]	6620	[3646, 7111]
840	[1512, 1513]	2767	[125, 4136]	4694	[5948, 5949]	6621	[7172, 7173]
841	[1359, 1514]	2768	[4137, 2279]	4695	[1597, 5457]	6622	[2650, 1322]
842	[437, 1515]	2769	[1943, 4138]	4696	[5364, 2799]	6623	[7174, 6296]
843	[1516, 1517]	2770	[1670, 4139]	4697	[5950, 5915]	6624	[5884, 3834]
844	[1518, 1519]	2771	[4140, 2467]	4698	[5951, 2691]	6625	[1302, 1439]
845	[1520, 355]	2772	[4141, 600]	4699	[3617, 5436]	6626	[3178, 5298]
846	[1521, 1522]	2773	[2313, 4142]	4700	[5952, 3825]	6627	[3636, 5927]
847	[1523, 1524]	2774	[4143, 4144]	4701	[1288, 5953]	6628	[1287, 3752]
848	[1525, 1321]	2775	[4145, 2454]	4702	[3801, 1115]	6629	[7175, 978]
849	[1526, 1527]	2776	[4146, 4147]	4703	[5954, 5955]	6630	[7176, 7177]
850	[1528, 1373]	2777	[4148, 4149]	4704	[5956, 3083]	6631	[7178, 981]
851	[1529, 1530]	2778	[4150, 4151]	4705	[5263, 1587]	6632	[1234, 5869]
852	[1531, 1385]	2779	[4152, 2470]	4706	[3861, 3513]	6633	[1440, 3445]
853	[1532, 1533]	2780	[4153, 4154]	4707	[5957, 969]	6634	[7179, 7180]
854	[1534, 1535]	2781	[4155, 4156]	4708	[115, 333]	6635	[1497, 6166]
855	[1536, 1537]	2782	[1795, 2382]	4709	[5958, 2617]	6636	[7181, 5891]
856	[1394, 1538]	2783	[4157, 4017]	4710	[2906, 5318]	6637	[7182, 5689]
857	[1539, 1540]	2784	[801, 2601]	4711	[5959, 1421]	6638	[2835, 283]
858	[1541, 1524]	2785	[4158, 4159]	4712	[5960, 1379]	6639	[7183, 5784]
859	[1542, 1543]	2786	[4160, 4161]	4713	[5961, 5962]	6640	[3269, 28]
860	[1544, 1545]	2787	[600, 4162]	4714	[3459, 344]	6641	[3449, 3412]
861	[1546, 1547]	2788	[1807, 4163]	4715	[2833, 2780]	6642	[267, 1471]
862	[962, 1548]	2789	[1726, 2177]	4716	[5963, 5462]	6643	[7184, 1468]
863	[1549, 1550]	2790	[4164, 2466]	4717	[5964, 5338]	6644	[371, 6201]
864	[369, 1551]	2791	[2447, 4165]	4718	[5466, 5965]	6645	[7185, 1265]
865	[1552, 326]	2792	[4166, 4167]	4719	[5966, 5566]	6646	[7098, 5801]
866	[1553, 1554]	2793	[4168, 4169]	4720	[5568, 3240]	6647	[5573, 5449]
867	[1555, 1294]	2794	[4170, 14]	4721	[1548, 3402]	6648	[5499, 5992]
868	[868, 868]	2795	[4171, 4172]	4722	[5967, 2984]	6649	[7186, 5345]
869	[1556, 1557]	2796	[4173, 4174]	4723	[5968, 5773]	6650	[7187, 3013]
870	[1437, 352]	2797	[1756, 4175]	4724	[245, 5756]	6651	[1304, 7188]
871	[1558, 109]	2798	[4176, 4177]	4725	[5684, 3594]	6652	[2871, 451]
872	[1446, 1071]	2799	[4178, 4179]	4726	[5969, 5524]	6653	[7189, 6000]
873	[1559, 1560]	2800	[4180, 4181]	4727	[5970, 5655]	6654	[1082, 5409]
874	[1561, 278]	2801	[4182, 2210]	4728	[2731, 2708]	6655	[26, 2726]
875	[1562, 1563]	2802	[4183, 1794]	4729	[5971, 1023]	6656	[7190, 5418]
876	[1564, 1565]	2803	[4184, 4185]	4730	[5972, 1002]	6657	[1223, 7191]

877	[1566, 1567]	2804	[4186, 4187]	4731	[5973, 2784]	6658	[5414, 3365]
878	[1568, 1569]	2805	[4188, 2056]	4732	[5974, 1354]	6659	[7192, 6357]
879	[1570, 1571]	2806	[4189, 1732]	4733	[5975, 1127]	6660	[6149, 7193]
880	[1572, 1573]	2807	[1800, 1699]	4734	[5631, 3670]	6661	[7194, 6165]
881	[1574, 1575]	2808	[2021, 4190]	4735	[5976, 3241]	6662	[5984, 2725]
882	[1576, 1577]	2809	[4191, 744]	4736	[3661, 5977]	6663	[7195, 5499]
883	[1578, 1579]	2810	[2306, 599]	4737	[5978, 946]	6664	[5809, 1362]
884	[452, 1580]	2811	[724, 4192]	4738	[5274, 295]	6665	[7196, 3951]
885	[1581, 933]	2812	[848, 2485]	4739	[5979, 5980]	6666	[904, 1236]
886	[1582, 1583]	2813	[3993, 2501]	4740	[5981, 3888]	6667	[3320, 3499]
887	[1584, 1585]	2814	[4193, 1955]	4741	[5982, 3451]	6668	[7197, 7142]
888	[1336, 1003]	2815	[2082, 2201]	4742	[5565, 5983]	6669	[1496, 5517]
889	[1586, 1587]	2816	[4194, 4040]	4743	[5984, 5864]	6670	[1030, 5373]
890	[391, 328]	2817	[4195, 4026]	4744	[3861, 5985]	6671	[5650, 3190]
891	[1588, 314]	2818	[3955, 4108]	4745	[5986, 5686]	6672	[918, 3187]
892	[1589, 1590]	2819	[4196, 878]	4746	[5987, 5988]	6673	[7198, 1097]
893	[1591, 1309]	2820	[4197, 4198]	4747	[5989, 5990]	6674	[6236, 3572]
894	[1592, 1593]	2821	[4199, 4200]	4748	[1471, 1092]	6675	[3789, 7075]
895	[1123, 1594]	2822	[4201, 2364]	4749	[3227, 3436]	6676	[5916, 5379]
896	[1595, 378]	2823	[4202, 4203]	4750	[455, 3048]	6677	[7199, 358]
897	[1596, 1597]	2824	[2271, 1685]	4751	[5991, 5992]	6678	[1495, 7078]
898	[1598, 1599]	2825	[4204, 4205]	4752	[5993, 1376]	6679	[3474, 3843]
899	[1600, 1601]	2826	[4206, 4207]	4753	[1437, 5994]	6680	[6197, 6324]
900	[1602, 1603]	2827	[4208, 4209]	4754	[5995, 3575]	6681	[7200, 7201]
901	[1604, 278]	2828	[4210, 4211]	4755	[5996, 5997]	6682	[7202, 6133]
902	[1605, 1410]	2829	[4212, 4213]	4756	[3606, 5552]	6683	[7203, 7204]
903	[1606, 1607]	2830	[2103, 2152]	4757	[5309, 1324]	6684	[5636, 1387]
904	[1608, 707]	2831	[4214, 4215]	4758	[5998, 1306]	6685	[6144, 7205]
905	[743, 1609]	2832	[2222, 2598]	4759	[5999, 6000]	6686	[1224, 7206]
906	[1610, 1611]	2833	[4216, 4217]	4760	[6001, 947]	6687	[5424, 7207]
907	[1612, 589]	2834	[4218, 2168]	4761	[6002, 3097]	6688	[7208, 2846]
908	[1613, 1614]	2835	[2185, 4219]	4762	[6003, 6004]	6689	[7209, 2679]
909	[819, 1615]	2836	[2073, 1622]	4763	[6005, 2665]	6690	[7125, 1495]
910	[596, 1616]	2837	[4215, 53]	4764	[5261, 5941]	6691	[1324, 2719]
911	[1617, 1618]	2838	[721, 4220]	4765	[440, 6006]	6692	[1284, 7210]
912	[1619, 1620]	2839	[4221, 884]	4766	[246, 79]	6693	[7211, 3263]
913	[1621, 1622]	2840	[4222, 771]	4767	[6007, 5901]	6694	[5295, 3135]
914	[588, 1623]	2841	[4223, 4224]	4768	[6008, 6009]	6695	[5666, 1270]
915	[1624, 793]	2842	[4225, 1915]	4769	[6010, 3924]	6696	[7212, 2995]
916	[1625, 665]	2843	[4135, 4226]	4770	[2962, 3036]	6697	[1506, 7213]
917	[1626, 1627]	2844	[4227, 897]	4771	[6011, 6012]	6698	[3365, 5601]
918	[1628, 1629]	2845	[127, 1642]	4772	[3735, 976]	6699	[2875, 3919]
919	[1630, 1631]	2846	[1733, 4228]	4773	[1524, 3488]	6700	[1275, 1432]
920	[145, 785]	2847	[4229, 4230]	4774	[6013, 3659]	6701	[3484, 3771]

921	[1632, 1633]	2848	[4231, 4232]	4775	[2745, 3375]	6702	[1037, 3375]
922	[1634, 587]	2849	[2071, 4090]	4776	[1072, 5368]	6703	[7214, 3535]
923	[151, 1635]	2850	[2397, 4233]	4777	[458, 2993]	6704	[3219, 3490]
924	[708, 1636]	2851	[4234, 4235]	4778	[5299, 2764]	6705	[2717, 434]
925	[1637, 204]	2852	[1765, 680]	4779	[6014, 5333]	6706	[7215, 257]
926	[1638, 1639]	2853	[4236, 1756]	4780	[6015, 1462]	6707	[7216, 6079]
927	[1640, 1641]	2854	[869, 484]	4781	[6016, 6017]	6708	[7217, 3484]
928	[701, 1642]	2855	[1820, 1757]	4782	[2840, 397]	6709	[7218, 3386]
929	[710, 1643]	2856	[2495, 4005]	4783	[6018, 6019]	6710	[1464, 3058]
930	[1644, 1645]	2857	[4237, 4238]	4784	[6020, 6021]	6711	[5814, 3010]
931	[744, 1646]	2858	[4239, 4240]	4785	[3619, 1230]	6712	[7219, 5897]
932	[1647, 1648]	2859	[4241, 3966]	4786	[315, 6022]	6713	[3946, 5328]
933	[1649, 1650]	2860	[716, 4242]	4787	[6023, 3484]	6714	[3367, 3211]
934	[1651, 1617]	2861	[2002, 4243]	4788	[6024, 3837]	6715	[6204, 7037]
935	[1652, 1653]	2862	[4244, 129]	4789	[3285, 2766]	6716	[1289, 3697]
936	[236, 1654]	2863	[4191, 1609]	4790	[6025, 6026]	6717	[1167, 7220]
937	[1655, 880]	2864	[4190, 1618]	4791	[1185, 2982]	6718	[7190, 332]
938	[1656, 1657]	2865	[204, 2337]	4792	[388, 3672]	6719	[3032, 3070]
939	[1658, 1659]	2866	[4245, 4246]	4793	[6027, 5888]	6720	[2621, 7221]
940	[1660, 1661]	2867	[2282, 1998]	4794	[6028, 5366]	6721	[7105, 436]
941	[1662, 1663]	2868	[4247, 4248]	4795	[3887, 5364]	6722	[3359, 479]
942	[1664, 1665]	2869	[4249, 4250]	4796	[3858, 1377]	6723	[2926, 1208]
943	[1666, 1667]	2870	[1889, 4251]	4797	[6029, 6030]	6724	[7222, 7223]
944	[1668, 1669]	2871	[4252, 127]	4798	[6031, 5522]	6725	[7224, 1420]
945	[1670, 1671]	2872	[4253, 2046]	4799	[6032, 3551]	6726	[7225, 6306]
946	[1672, 1673]	2873	[4254, 4255]	4800	[6033, 3828]	6727	[5388, 5903]
947	[1674, 1675]	2874	[4256, 1787]	4801	[3853, 3938]	6728	[2764, 7226]
948	[226, 1676]	2875	[4257, 693]	4802	[5595, 3707]	6729	[7227, 1376]
949	[1677, 1678]	2876	[4258, 127]	4803	[1463, 999]	6730	[1413, 2822]
950	[1679, 793]	2877	[4259, 4260]	4804	[6034, 3325]	6731	[5471, 2988]
951	[1680, 1681]	2878	[4261, 601]	4805	[6035, 2810]	6732	[3732, 1455]
952	[1682, 1683]	2879	[3993, 4262]	4806	[3840, 6036]	6733	[7228, 1392]
953	[1684, 1685]	2880	[4263, 4264]	4807	[6037, 6038]	6734	[300, 3556]
954	[1686, 1687]	2881	[4094, 4265]	4808	[1587, 6039]	6735	[3928, 5303]
955	[1688, 1689]	2882	[4266, 2032]	4809	[6040, 3458]	6736	[7229, 7104]
956	[1690, 1691]	2883	[4267, 1939]	4810	[5880, 3271]	6737	[3282, 5458]
957	[1692, 1693]	2884	[4268, 4269]	4811	[5987, 5485]	6738	[5580, 1361]
958	[1694, 1695]	2885	[4270, 46]	4812	[1589, 3006]	6739	[7030, 1496]
959	[1696, 1697]	2886	[4271, 4272]	4813	[6041, 3247]	6740	[7230, 3655]
960	[1698, 1699]	2887	[4273, 4274]	4814	[6042, 5997]	6741	[7063, 5849]
961	[1663, 1700]	2888	[4275, 4276]	4815	[6043, 6044]	6742	[7144, 3168]
962	[1701, 1702]	2889	[4277, 227]	4816	[5555, 6045]	6743	[5957, 6273]
963	[164, 239]	2890	[2143, 4278]	4817	[6046, 6047]	6744	[7231, 7232]
964	[1703, 1704]	2891	[606, 1718]	4818	[6048, 5539]	6745	[288, 5731]

965	[818, 1705]	2892	[4279, 2543]	4819	[6049, 6050]	6746	[7233, 2855]
966	[1706, 857]	2893	[4280, 1908]	4820	[3361, 2795]	6747	[5877, 1341]
967	[1707, 1708]	2894	[4281, 4282]	4821	[6013, 6051]	6748	[7234, 7235]
968	[1709, 1710]	2895	[1688, 4283]	4822	[6052, 6026]	6749	[3635, 3280]
969	[1711, 1712]	2896	[4284, 3953]	4823	[6053, 6054]	6750	[7202, 6195]
970	[1713, 725]	2897	[4115, 4282]	4824	[6055, 3360]	6751	[7236, 7237]
971	[700, 1714]	2898	[4285, 4286]	4825	[6056, 1375]	6752	[3852, 3060]
972	[1715, 1716]	2899	[2241, 4287]	4826	[6057, 5378]	6753	[1543, 3075]
973	[1717, 1718]	2900	[4288, 4289]	4827	[6058, 3813]	6754	[7238, 6204]
974	[1719, 1720]	2901	[4290, 4291]	4828	[5517, 6059]	6755	[5874, 6059]
975	[1721, 1722]	2902	[4292, 4163]	4829	[5943, 3497]	6756	[7239, 7240]
976	[1723, 616]	2903	[4293, 2163]	4830	[6060, 340]	6757	[7241, 3497]
977	[1724, 1725]	2904	[4294, 888]	4831	[5276, 3518]	6758	[7242, 1001]
978	[1726, 1727]	2905	[2022, 512]	4832	[6061, 6062]	6759	[7243, 7244]
979	[1728, 1729]	2906	[4295, 4296]	4833	[6063, 3853]	6760	[5297, 3179]
980	[1730, 715]	2907	[2250, 4297]	4834	[6064, 6065]	6761	[271, 1144]
981	[1731, 1732]	2908	[4298, 870]	4835	[1374, 6066]	6762	[3821, 5745]
982	[1733, 1734]	2909	[4299, 4300]	4836	[5311, 6067]	6763	[5810, 3310]
983	[1735, 1736]	2910	[4301, 4302]	4837	[6068, 947]	6764	[7245, 948]
984	[1737, 1738]	2911	[4303, 738]	4838	[2765, 3286]	6765	[7112, 5356]
985	[1739, 167]	2912	[4304, 2512]	4839	[3325, 2620]	6766	[7246, 429]
986	[1740, 1741]	2913	[4305, 4306]	4840	[6069, 6070]	6767	[7247, 1167]
987	[1742, 1743]	2914	[4307, 4308]	4841	[6071, 6072]	6768	[3758, 3390]
988	[685, 219]	2915	[4309, 4310]	4842	[6073, 5481]	6769	[5530, 3338]
989	[862, 1744]	2916	[4311, 4312]	4843	[6074, 5746]	6770	[6331, 7248]
990	[1745, 1746]	2917	[4313, 4314]	4844	[3522, 3697]	6771	[7249, 7250]
991	[1747, 617]	2918	[4315, 2546]	4845	[1115, 5382]	6772	[2695, 408]
992	[631, 791]	2919	[2118, 4316]	4846	[5429, 2618]	6773	[7251, 5990]
993	[1748, 758]	2920	[4317, 1754]	4847	[6075, 3099]	6774	[5802, 7252]
994	[1749, 1641]	2921	[4315, 682]	4848	[6076, 377]	6775	[3940, 1160]
995	[1750, 1751]	2922	[2024, 4264]	4849	[5685, 6077]	6776	[1192, 7253]
996	[1752, 559]	2923	[4318, 4319]	4850	[6078, 5710]	6777	[7254, 6070]
997	[1753, 1754]	2924	[4320, 4321]	4851	[69, 3000]	6778	[7007, 1129]
998	[1755, 1756]	2925	[620, 4322]	4852	[3693, 6079]	6779	[1269, 5667]
999	[587, 153]	2926	[2608, 4323]	4853	[5609, 3477]	6780	[7255, 5490]
1000	[1634, 152]	2927	[844, 830]	4854	[6080, 5573]	6781	[1014, 6340]
1001	[194, 1757]	2928	[4324, 2204]	4855	[6081, 6082]	6782	[7256, 7257]
1002	[1758, 1759]	2929	[4325, 4326]	4856	[6083, 5627]	6783	[7258, 3119]
1003	[1760, 755]	2930	[2099, 4327]	4857	[6084, 6074]	6784	[7259, 5898]
1004	[1761, 1762]	2931	[2236, 1634]	4858	[6085, 2819]	6785	[7260, 5286]
1005	[1763, 1764]	2932	[836, 1761]	4859	[3209, 6086]	6786	[5516, 7017]
1006	[1765, 1766]	2933	[4328, 1759]	4860	[5691, 416]	6787	[7261, 7262]
1007	[1767, 1768]	2934	[4329, 4330]	4861	[6087, 6088]	6788	[6074, 1050]
1008	[744, 841]	2935	[4331, 4332]	4862	[3644, 3895]	6789	[7263, 7264]

1009	[1769, 1770]	2936	[4333, 655]	4863	[6089, 5496]	6790	[7265, 3116]
1010	[770, 1771]	2937	[4334, 4335]	4864	[6090, 6091]	6791	[7266, 7090]
1011	[1772, 1773]	2938	[4336, 4337]	4865	[2630, 6092]	6792	[5283, 1162]
1012	[1774, 1775]	2939	[1639, 4338]	4866	[6093, 3835]	6793	[6082, 1202]
1013	[1776, 1777]	2940	[4339, 4340]	4867	[6094, 370]	6794	[7267, 7268]
1014	[1778, 1779]	2941	[1611, 4341]	4868	[6075, 5894]	6795	[7269, 1492]
1015	[1780, 1781]	2942	[4342, 4343]	4869	[2806, 3507]	6796	[429, 5630]
1016	[1782, 1783]	2943	[2414, 4344]	4870	[6095, 1369]	6797	[5548, 1197]
1017	[1784, 1785]	2944	[4345, 4346]	4871	[6096, 1006]	6798	[3664, 7270]
1018	[1786, 1787]	2945	[710, 505]	4872	[3216, 5312]	6799	[7271, 6245]
1019	[1788, 1789]	2946	[4170, 4253]	4873	[6097, 5734]	6800	[1175, 7272]
1020	[1790, 886]	2947	[4347, 4348]	4874	[5706, 5884]	6801	[7273, 3804]
1021	[1791, 1792]	2948	[4349, 4350]	4875	[6098, 3357]	6802	[3167, 7145]
1022	[1793, 1794]	2949	[4351, 4352]	4876	[6099, 372]	6803	[1166, 6318]
1023	[1795, 490]	2950	[2085, 2287]	4877	[5652, 6100]	6804	[5887, 3921]
1024	[1796, 1797]	2951	[2226, 1651]	4878	[1429, 3666]	6805	[7274, 7275]
1025	[1798, 1799]	2952	[4353, 2604]	4879	[6101, 3138]	6806	[2987, 5472]
1026	[1800, 756]	2953	[4354, 4355]	4880	[6102, 3126]	6807	[7276, 5867]
1027	[629, 1801]	2954	[4356, 4357]	4881	[2693, 1411]	6808	[7185, 426]
1028	[1802, 1803]	2955	[4082, 4358]	4882	[5725, 1567]	6809	[7277, 7201]
1029	[1804, 1805]	2956	[4359, 4360]	4883	[6103, 6104]	6810	[7278, 5686]
1030	[1806, 529]	2957	[4361, 4362]	4884	[6105, 281]	6811	[2869, 2716]
1031	[1807, 1808]	2958	[4363, 1817]	4885	[6106, 2919]	6812	[2823, 3833]
1032	[1809, 1810]	2959	[4013, 129]	4886	[5856, 1434]	6813	[7279, 7280]
1033	[1811, 1812]	2960	[898, 4033]	4887	[6107, 5405]	6814	[7281, 3297]
1034	[1813, 1814]	2961	[601, 4364]	4888	[5892, 3254]	6815	[5463, 5779]
1035	[1815, 1723]	2962	[4365, 4366]	4889	[6108, 5478]	6816	[7282, 7283]
1036	[1816, 1817]	2963	[2049, 850]	4890	[6109, 5558]	6817	[1421, 7284]
1037	[1818, 1819]	2964	[1854, 4367]	4891	[5972, 6110]	6818	[3899, 2928]
1038	[1820, 195]	2965	[4092, 4368]	4892	[6111, 1420]	6819	[1385, 5649]
1039	[1821, 1822]	2966	[2475, 721]	4893	[3851, 3081]	6820	[7285, 5814]
1040	[1823, 1824]	2967	[1972, 534]	4894	[379, 5615]	6821	[974, 5980]
1041	[1825, 1726]	2968	[788, 2236]	4895	[6112, 2701]	6822	[7286, 1539]
1042	[1826, 1827]	2969	[4369, 4269]	4896	[6113, 6114]	6823	[7287, 1442]
1043	[1828, 1829]	2970	[4370, 4330]	4897	[5639, 3125]	6824	[3611, 3490]
1044	[1830, 1831]	2971	[1646, 4371]	4898	[6115, 6116]	6825	[3290, 7288]
1045	[1832, 1833]	2972	[4372, 2355]	4899	[6117, 3266]	6826	[7289, 7235]
1046	[1834, 1835]	2973	[4373, 4374]	4900	[2841, 5400]	6827	[6115, 3917]
1047	[1836, 1837]	2974	[2592, 4375]	4901	[3190, 5870]	6828	[7290, 3601]
1048	[1838, 1839]	2975	[4376, 4377]	4902	[6118, 5423]	6829	[3182, 3466]
1049	[1840, 1841]	2976	[4378, 4379]	4903	[3310, 2857]	6830	[1182, 7291]
1050	[798, 1842]	2977	[683, 4380]	4904	[3204, 5347]	6831	[7292, 6221]
1051	[1655, 1843]	2978	[518, 561]	4905	[2685, 6119]	6832	[6090, 5625]
1052	[1844, 1845]	2979	[38, 493]	4906	[6120, 1192]	6833	[1103, 6017]

1053	[1640, 1846]	2980	[4381, 1696]	4907	[5430, 3565]	6834	[5744, 7293]
1054	[1847, 1848]	2981	[4382, 4383]	4908	[1278, 5919]	6835	[311, 417]
1055	[1849, 1850]	2982	[4384, 805]	4909	[6121, 293]	6836	[2897, 3316]
1056	[1851, 1852]	2983	[4385, 1715]	4910	[2818, 2625]	6837	[90, 6288]
1057	[1853, 1854]	2984	[4386, 2332]	4911	[6122, 1205]	6838	[63, 5928]
1058	[1855, 1856]	2985	[704, 4387]	4912	[6123, 6124]	6839	[1280, 3483]
1059	[1857, 1858]	2986	[4388, 1862]	4913	[5995, 5657]	6840	[7294, 7295]
1060	[1859, 1860]	2987	[660, 619]	4914	[16, 316]	6841	[3336, 2647]
1061	[1861, 1862]	2988	[4389, 4390]	4915	[3683, 6125]	6842	[7296, 2658]
1062	[1863, 1864]	2989	[4391, 4392]	4916	[6126, 282]	6843	[3610, 3219]
1063	[1865, 1866]	2990	[4393, 4394]	4917	[6127, 3031]	6844	[7297, 7298]
1064	[1867, 583]	2991	[4395, 2208]	4918	[2744, 3654]	6845	[5845, 1223]
1065	[1868, 1869]	2992	[515, 2556]	4919	[26, 3232]	6846	[3107, 5974]
1066	[1870, 1871]	2993	[191, 4396]	4920	[6128, 6129]	6847	[7299, 3396]
1067	[1872, 1873]	2994	[4397, 4398]	4921	[6130, 3929]	6848	[6168, 7300]
1068	[1775, 1874]	2995	[4399, 2412]	4922	[6131, 5773]	6849	[3949, 1274]
1069	[1875, 1876]	2996	[4400, 4401]	4923	[6132, 6133]	6850	[7301, 3320]
1070	[1877, 1878]	2997	[4402, 4403]	4924	[6134, 6135]	6851	[7302, 5381]
1071	[1879, 595]	2998	[4404, 748]	4925	[398, 3843]	6852	[7303, 3008]
1072	[148, 1880]	2999	[4405, 1702]	4926	[6136, 3119]	6853	[3432, 7304]
1073	[1881, 787]	3000	[2153, 674]	4927	[6137, 3679]	6854	[7305, 7159]
1074	[584, 582]	3001	[4406, 4407]	4928	[6138, 5949]	6855	[2855, 395]
1075	[1882, 1635]	3002	[616, 4408]	4929	[2718, 1325]	6856	[7306, 6182]
1076	[1883, 151]	3003	[4409, 2462]	4930	[6139, 5882]	6857	[2766, 6248]
1077	[786, 1884]	3004	[2175, 4410]	4931	[6140, 5294]	6858	[1352, 7055]
1078	[535, 1885]	3005	[578, 584]	4932	[6141, 6142]	6859	[5590, 1339]
1079	[586, 1886]	3006	[582, 576]	4933	[6143, 6144]	6860	[7307, 7308]
1080	[833, 1867]	3007	[4411, 4412]	4934	[25, 3231]	6861	[7309, 3744]
1081	[1880, 786]	3008	[1752, 4413]	4935	[6145, 3661]	6862	[7310, 2644]
1082	[1632, 148]	3009	[4414, 2480]	4936	[3486, 6146]	6863	[1418, 5542]
1083	[1887, 788]	3010	[4415, 4416]	4937	[6147, 5583]	6864	[1596, 1098]
1084	[867, 867]	3011	[2394, 1681]	4938	[6148, 1104]	6865	[7311, 7308]
1085	[147, 1633]	3012	[4417, 4418]	4939	[6149, 3380]	6866	[7312, 7071]
1086	[151, 1888]	3013	[4419, 2455]	4940	[6150, 6067]	6867	[3571, 1112]
1087	[209, 1885]	3014	[4420, 2495]	4941	[6151, 3634]	6868	[6, 1497]
1088	[1633, 580]	3015	[1789, 4421]	4942	[6152, 6153]	6869	[7313, 2852]
1089	[585, 1889]	3016	[2054, 4422]	4943	[6154, 3902]	6870	[7314, 7315]
1090	[1880, 581]	3017	[2155, 4423]	4944	[6085, 2625]	6871	[3413, 7316]
1091	[1890, 579]	3018	[4424, 4425]	4945	[2667, 6155]	6872	[6178, 7317]
1092	[1891, 1892]	3019	[4426, 4427]	4946	[6156, 481]	6873	[7318, 7275]
1093	[1893, 1894]	3020	[4428, 4128]	4947	[3343, 391]	6874	[5702, 5611]
1094	[1895, 1896]	3021	[1919, 4429]	4948	[464, 1003]	6875	[404, 1237]
1095	[1897, 1898]	3022	[4042, 4430]	4949	[6157, 6158]	6876	[993, 1344]
1096	[1899, 1900]	3023	[1646, 842]	4950	[5840, 6159]	6877	[3062, 5887]

1097	[1901, 1902]	3024	[4431, 579]	4951	[6160, 3749]	6878	[373, 3588]
1098	[1903, 1904]	3025	[1890, 208]	4952	[1373, 3509]	6879	[7319, 2846]
1099	[1905, 1906]	3026	[4431, 208]	4953	[6161, 6047]	6880	[1300, 1408]
1100	[1907, 1908]	3027	[581, 1884]	4954	[473, 3640]	6881	[3563, 5426]
1101	[1909, 1910]	3028	[2236, 583]	4955	[960, 3680]	6882	[454, 7320]
1102	[165, 1911]	3029	[577, 149]	4956	[6162, 3262]	6883	[7029, 1272]
1103	[1912, 1913]	3030	[38, 584]	4957	[1423, 6163]	6884	[7321, 7322]
1104	[1914, 1915]	3031	[153, 37]	4958	[6127, 5754]	6885	[5974, 3866]
1105	[1916, 1917]	3032	[4432, 1881]	4959	[3778, 3078]	6886	[7323, 6278]
1106	[1918, 1919]	3033	[4433, 4434]	4960	[6164, 6165]	6887	[1057, 5780]
1107	[1920, 1921]	3034	[4435, 4401]	4961	[3049, 6166]	6888	[7125, 7030]
1108	[873, 1922]	3035	[4436, 60]	4962	[6167, 2669]	6889	[7324, 2616]
1109	[1923, 1924]	3036	[4437, 4438]	4963	[5907, 5889]	6890	[7325, 3886]
1110	[691, 1776]	3037	[4439, 4440]	4964	[5536, 2826]	6891	[6056, 6066]
1111	[1925, 1926]	3038	[1982, 4394]	4965	[6168, 6169]	6892	[7326, 3897]
1112	[1927, 527]	3039	[4441, 4442]	4966	[3110, 116]	6893	[5400, 7327]
1113	[1928, 1929]	3040	[4052, 1693]	4967	[5645, 5594]	6894	[5735, 3802]
1114	[1930, 1931]	3041	[4443, 4444]	4968	[6139, 2752]	6895	[7328, 2774]
1115	[1932, 1933]	3042	[4445, 4326]	4969	[6170, 1044]	6896	[1555, 2880]
1116	[1934, 1935]	3043	[4446, 4447]	4970	[1219, 6171]	6897	[2739, 368]
1117	[535, 789]	3044	[55, 2393]	4971	[3759, 1429]	6898	[1210, 3295]
1118	[1936, 1937]	3045	[4000, 4448]	4972	[19, 1251]	6899	[7329, 7205]
1119	[1938, 1939]	3046	[4295, 4449]	4973	[5397, 6172]	6900	[7330, 2890]
1120	[1940, 879]	3047	[4073, 4165]	4974	[6173, 5308]	6901	[5651, 5540]
1121	[239, 1911]	3048	[4450, 2172]	4975	[6174, 5654]	6902	[7331, 1592]
1122	[707, 1941]	3049	[12, 4451]	4976	[3713, 6175]	6903	[7332, 412]
1123	[1942, 203]	3050	[4452, 4453]	4977	[3413, 6176]	6904	[2924, 5743]
1124	[1943, 1944]	3051	[4454, 669]	4978	[3653, 6177]	6905	[919, 7220]
1125	[1945, 728]	3052	[4455, 2400]	4979	[1118, 330]	6906	[7333, 3452]
1126	[1867, 1634]	3053	[1748, 746]	4980	[6178, 957]	6907	[5315, 3276]
1127	[1946, 1947]	3054	[4456, 4447]	4981	[3029, 3567]	6908	[7258, 119]
1128	[1948, 32]	3055	[4457, 4458]	4982	[2978, 5513]	6909	[5976, 1435]
1129	[752, 563]	3056	[1621, 2074]	4983	[3585, 3881]	6910	[7334, 3650]
1130	[1949, 1950]	3057	[4459, 2007]	4984	[1358, 359]	6911	[6351, 5561]
1131	[1951, 600]	3058	[2465, 4460]	4985	[3866, 1355]	6912	[7335, 5563]
1132	[1952, 1953]	3059	[4461, 4462]	4986	[1605, 2693]	6913	[3335, 7336]
1133	[1954, 1955]	3060	[4463, 4464]	4987	[6179, 3932]	6914	[3206, 5599]
1134	[1664, 1956]	3061	[4465, 137]	4988	[6106, 1100]	6915	[7337, 3571]
1135	[1957, 1958]	3062	[4466, 2578]	4989	[6180, 6181]	6916	[3120, 7338]
1136	[1959, 1960]	3063	[2411, 4467]	4990	[5375, 2930]	6917	[7339, 7340]
1137	[1961, 1962]	3064	[2321, 4468]	4991	[6182, 2831]	6918	[7139, 3465]
1138	[1963, 1964]	3065	[4469, 4470]	4992	[1031, 6183]	6919	[328, 2711]
1139	[1965, 1966]	3066	[4471, 4472]	4993	[5971, 5406]	6920	[5849, 7341]
1140	[1967, 726]	3067	[4473, 4254]	4994	[996, 6184]	6921	[3629, 7342]

1141	[218, 686]	3068	[4474, 2312]	4995	[2901, 402]	6922	[7343, 7344]
1142	[1968, 1969]	3069	[4475, 4250]	4996	[3003, 1046]	6923	[7345, 7346]
1143	[1970, 1971]	3070	[4140, 492]	4997	[2831, 2966]	6924	[1510, 5289]
1144	[1972, 1973]	3071	[4476, 4198]	4998	[1179, 6185]	6925	[7347, 1141]
1145	[484, 1974]	3072	[4477, 4458]	4999	[3767, 103]	6926	[5819, 2746]
1146	[1743, 1975]	3073	[4478, 4479]	5000	[990, 5435]	6927	[7348, 7340]
1147	[1976, 1977]	3074	[4480, 4001]	5001	[6186, 6187]	6928	[7349, 3451]
1148	[1978, 1979]	3075	[4464, 4481]	5002	[1322, 6188]	6929	[440, 3554]
1149	[1980, 1981]	3076	[2093, 597]	5003	[5484, 5988]	6930	[7350, 2678]
1150	[1982, 1983]	3077	[4482, 4483]	5004	[5665, 5800]	6931	[7351, 2754]
1151	[1984, 1736]	3078	[4484, 4485]	5005	[6189, 6190]	6932	[7352, 3718]
1152	[1985, 1986]	3079	[4486, 4487]	5006	[6191, 3923]	6933	[1460, 5574]
1153	[1609, 841]	3080	[4488, 2110]	5007	[3622, 6072]	6934	[7353, 1101]
1154	[1987, 1988]	3081	[1967, 130]	5008	[6192, 6193]	6935	[2792, 1408]
1155	[885, 1989]	3082	[821, 4489]	5009	[6194, 5783]	6936	[7164, 7354]
1156	[1990, 181]	3083	[569, 4490]	5010	[29, 5738]	6937	[3505, 7355]
1157	[1991, 1992]	3084	[4491, 4492]	5011	[6132, 6195]	6938	[5519, 3638]
1158	[1993, 873]	3085	[4493, 4494]	5012	[2674, 5571]	6939	[7356, 3911]
1159	[1724, 1994]	3086	[4495, 4496]	5013	[6196, 5515]	6940	[3731, 7293]
1160	[1809, 1995]	3087	[1805, 4497]	5014	[6197, 6198]	6941	[7357, 6160]
1161	[1996, 1997]	3088	[4498, 4499]	5015	[282, 2836]	6942	[7358, 3175]
1162	[1998, 1999]	3089	[4500, 4501]	5016	[312, 3698]	6943	[6366, 6182]
1163	[2000, 2001]	3090	[2209, 838]	5017	[1600, 3818]	6944	[5899, 1483]
1164	[2002, 2003]	3091	[2135, 4502]	5018	[6199, 3202]	6945	[7359, 2729]
1165	[2004, 2005]	3092	[4503, 4504]	5019	[3864, 2788]	6946	[929, 7360]
1166	[2006, 1738]	3093	[4505, 4075]	5020	[6200, 73]	6947	[6353, 3821]
1167	[2007, 2008]	3094	[1840, 1620]	5021	[6099, 6201]	6948	[7361, 6328]
1168	[2009, 2010]	3095	[614, 4009]	5022	[6202, 5568]	6949	[1331, 7098]
1169	[2011, 2012]	3096	[4506, 1845]	5023	[6203, 6204]	6950	[983, 7017]
1170	[2013, 2014]	3097	[4507, 4508]	5024	[6205, 6206]	6951	[393, 5536]
1171	[2015, 2016]	3098	[4509, 4310]	5025	[6207, 5372]	6952	[7362, 3511]
1172	[2017, 2018]	3099	[4510, 4511]	5026	[971, 6208]	6953	[7363, 7147]
1173	[2019, 2020]	3100	[2544, 4512]	5027	[3093, 5816]	6954	[5557, 7364]
1174	[2021, 1617]	3101	[4513, 4289]	5028	[6209, 973]	6955	[16, 6022]
1175	[790, 632]	3102	[4155, 859]	5029	[5766, 2906]	6956	[7175, 5847]
1176	[2022, 2023]	3103	[4514, 4515]	5030	[6210, 2759]	6957	[7101, 5769]
1177	[2024, 2025]	3104	[1719, 4516]	5031	[1299, 6188]	6958	[469, 5360]
1178	[2026, 171]	3105	[212, 4517]	5032	[6061, 6211]	6959	[1433, 5857]
1179	[2027, 2028]	3106	[756, 4518]	5033	[6212, 5829]	6960	[3924, 7180]
1180	[2029, 2030]	3107	[1610, 1764]	5034	[5622, 1027]	6961	[7365, 1487]
1181	[2031, 2032]	3108	[4519, 4520]	5035	[2804, 6213]	6962	[3223, 7366]
1182	[2033, 2034]	3109	[4521, 4522]	5036	[5336, 3164]	6963	[3216, 2808]
1183	[2035, 2036]	3110	[4523, 2423]	5037	[6214, 3782]	6964	[7367, 6169]
1184	[165, 2037]	3111	[4524, 4525]	5038	[2626, 6215]	6965	[7074, 341]

1185	[1971, 2038]	3112	[4526, 4527]	5039	[6216, 6217]	6966	[6094, 1551]
1186	[2039, 2040]	3113	[4528, 4529]	5040	[6218, 481]	6967	[2653, 2695]
1187	[1773, 2041]	3114	[4530, 4531]	5041	[6219, 1221]	6968	[3214, 5275]
1188	[2042, 625]	3115	[4532, 4533]	5042	[6220, 6221]	6969	[7368, 6215]
1189	[848, 2043]	3116	[627, 525]	5043	[1396, 272]	6970	[3232, 2727]
1190	[2044, 2045]	3117	[4534, 4535]	5044	[3304, 1246]	6971	[7369, 3189]
1191	[14, 2046]	3118	[4536, 4537]	5045	[3349, 6222]	6972	[6160, 2859]
1192	[2047, 2048]	3119	[4538, 2384]	5046	[3780, 1305]	6973	[1144, 7042]
1193	[2049, 2050]	3120	[4539, 1645]	5047	[3448, 3426]	6974	[7370, 7371]
1194	[700, 2051]	3121	[4540, 2446]	5048	[2963, 3291]	6975	[7372, 6142]
1195	[2052, 2053]	3122	[4176, 2266]	5049	[6223, 1412]	6976	[1566, 5726]
1196	[1803, 2054]	3123	[1677, 2311]	5050	[3258, 1493]	6977	[7373, 3441]
1197	[2055, 2056]	3124	[4541, 4542]	5051	[6224, 6225]	6978	[954, 3746]
1198	[2057, 2058]	3125	[4543, 4144]	5052	[3706, 5596]	6979	[5703, 1435]
1199	[2059, 729]	3126	[2304, 742]	5053	[987, 465]	6980	[3332, 5716]
1200	[618, 2060]	3127	[4544, 1958]	5054	[6226, 5274]	6981	[2991, 444]
1201	[2061, 1836]	3128	[4545, 4546]	5055	[6227, 5808]	6982	[6014, 5771]
1202	[2062, 2063]	3129	[4547, 4548]	5056	[6228, 3915]	6983	[7374, 7375]
1203	[2064, 895]	3130	[4549, 4241]	5057	[6229, 6230]	6984	[942, 961]
1204	[2065, 2066]	3131	[4550, 4551]	5058	[6212, 2911]	6985	[7376, 950]
1205	[2067, 2068]	3132	[4552, 4553]	5059	[6231, 3853]	6986	[1366, 5663]
1206	[2069, 2070]	3133	[4554, 4555]	5060	[6232, 6233]	6987	[7377, 7378]
1207	[2071, 2072]	3134	[4556, 4557]	5061	[6234, 6235]	6988	[1232, 5336]
1208	[2073, 2074]	3135	[4558, 1866]	5062	[1541, 3487]	6989	[3688, 3541]
1209	[2075, 550]	3136	[1946, 4559]	5063	[6236, 1112]	6990	[7379, 5569]
1210	[2076, 2077]	3137	[4560, 4561]	5064	[6237, 5848]	6991	[7380, 7381]
1211	[2078, 539]	3138	[4382, 2438]	5065	[6238, 5748]	6992	[7382, 7383]
1212	[2079, 2080]	3139	[4562, 1872]	5066	[1115, 6239]	6993	[2842, 7384]
1213	[1691, 2081]	3140	[4563, 1619]	5067	[262, 5559]	6994	[5779, 1340]
1214	[2082, 36]	3141	[4564, 1650]	5068	[6240, 5850]	6995	[3197, 7288]
1215	[2010, 1933]	3142	[4261, 4162]	5069	[6241, 1017]	6996	[2873, 3483]
1216	[2083, 2084]	3143	[2295, 773]	5070	[366, 1194]	6997	[7385, 3902]
1217	[2085, 751]	3144	[4565, 4566]	5071	[5545, 6242]	6998	[7386, 3493]
1218	[2086, 2087]	3145	[2255, 2547]	5072	[6136, 119]	6999	[5492, 7387]
1219	[720, 2088]	3146	[4567, 4568]	5073	[6243, 64]	7000	[3207, 6247]
1220	[2089, 2090]	3147	[858, 4156]	5074	[6151, 6244]	7001	[1139, 7206]
1221	[2091, 2092]	3148	[4569, 1629]	5075	[6245, 2893]	7002	[2876, 7248]
1222	[2093, 1616]	3149	[4570, 694]	5076	[1258, 6246]	7003	[5926, 1578]
1223	[747, 2094]	3150	[4571, 3968]	5077	[1371, 6247]	7004	[7388, 4596]
1224	[2095, 2096]	3151	[2534, 769]	5078	[3286, 6248]	7005	[7389, 6832]
1225	[2015, 221]	3152	[4572, 4319]	5079	[6249, 3087]	7006	[2450, 4542]
1226	[2097, 2098]	3153	[4573, 4574]	5080	[6250, 1132]	7007	[6411, 5115]
1227	[2099, 2100]	3154	[4575, 40]	5081	[6223, 5526]	7008	[604, 4489]
1228	[2101, 2102]	3155	[2127, 4131]	5082	[6251, 6252]	7009	[7390, 7391]

1229	[2103, 2104]	3156	[2477, 4048]	5083	[6253, 6254]	7010	[5127, 6703]
1230	[2105, 1843]	3157	[4576, 4577]	5084	[6255, 6256]	7011	[7392, 6834]
1231	[2106, 2107]	3158	[137, 640]	5085	[2844, 452]	7012	[6538, 6412]
1232	[2108, 2109]	3159	[1699, 4518]	5086	[6257, 3605]	7013	[6687, 4100]
1233	[229, 2110]	3160	[4578, 2550]	5087	[6258, 6259]	7014	[7393, 6730]
1234	[2111, 2112]	3161	[4546, 2219]	5088	[402, 3664]	7015	[7394, 6755]
1235	[2113, 2114]	3162	[2538, 4579]	5089	[6260, 6254]	7016	[6607, 4496]
1236	[1607, 2115]	3163	[2371, 2171]	5090	[6261, 364]	7017	[7395, 6646]
1237	[767, 199]	3164	[4580, 2051]	5091	[6262, 2656]	7018	[7396, 7397]
1238	[769, 2116]	3165	[4441, 4581]	5092	[6263, 6082]	7019	[7398, 2073]
1239	[2117, 523]	3166	[2486, 4107]	5093	[1526, 6264]	7020	[4498, 5187]
1240	[2118, 2119]	3167	[4582, 1728]	5094	[6265, 3609]	7021	[1835, 1658]
1241	[2120, 2121]	3168	[4583, 1730]	5095	[5534, 3056]	7022	[5008, 6387]
1242	[2122, 2123]	3169	[4584, 4585]	5096	[3483, 5876]	7023	[2120, 6903]
1243	[2124, 2125]	3170	[4367, 4586]	5097	[5405, 6183]	7024	[5196, 4339]
1244	[2126, 651]	3171	[4587, 4588]	5098	[6266, 945]	7025	[4728, 4565]
1245	[2127, 2128]	3172	[4589, 4228]	5099	[2898, 6153]	7026	[4446, 7399]
1246	[2129, 2130]	3173	[2606, 4590]	5100	[5752, 5585]	7027	[5025, 4823]
1247	[2131, 2132]	3174	[4591, 4592]	5101	[1595, 3472]	7028	[5191, 2132]
1248	[2133, 2134]	3175	[4593, 4594]	5102	[6267, 5740]	7029	[4831, 5228]
1249	[2135, 872]	3176	[2148, 4595]	5103	[2932, 1250]	7030	[7400, 2192]
1250	[2136, 2137]	3177	[4596, 4597]	5104	[6268, 286]	7031	[2548, 7401]
1251	[2138, 2139]	3178	[124, 4453]	5105	[6269, 6270]	7032	[7402, 2526]
1252	[2140, 2141]	3179	[4598, 4599]	5106	[3545, 2885]	7033	[4690, 4929]
1253	[2142, 2143]	3180	[1783, 1767]	5107	[6271, 5962]	7034	[7403, 4280]
1254	[2144, 2145]	3181	[1785, 4600]	5108	[375, 6272]	7035	[7404, 7405]
1255	[2108, 2146]	3182	[9, 4101]	5109	[968, 6273]	7036	[519, 7406]
1256	[2147, 2148]	3183	[3997, 4601]	5110	[5323, 3712]	7037	[4333, 5176]
1257	[2149, 2150]	3184	[2029, 2596]	5111	[6274, 5442]	7038	[7407, 7408]
1258	[2151, 2152]	3185	[2232, 210]	5112	[2949, 3821]	7039	[2291, 4110]
1259	[2153, 2154]	3186	[4299, 4602]	5113	[2761, 1547]	7040	[4681, 4346]
1260	[2155, 2156]	3187	[4603, 4604]	5114	[5418, 6033]	7041	[6675, 7409]
1261	[2157, 2158]	3188	[1832, 4605]	5115	[6275, 5648]	7042	[7410, 4427]
1262	[2159, 2160]	3189	[2359, 4606]	5116	[6276, 1583]	7043	[185, 5070]
1263	[2101, 2161]	3190	[2174, 2473]	5117	[6277, 6278]	7044	[2302, 1614]
1264	[2162, 1710]	3191	[4607, 1810]	5118	[6279, 6280]	7045	[1713, 4192]
1265	[2163, 2040]	3192	[4608, 507]	5119	[5770, 5445]	7046	[2088, 7411]
1266	[2164, 2165]	3193	[220, 2016]	5120	[1598, 6281]	7047	[4454, 4528]
1267	[2166, 2167]	3194	[1994, 4609]	5121	[2734, 3231]	7048	[6969, 7412]
1268	[569, 2168]	3195	[2307, 2245]	5122	[6282, 5923]	7049	[6829, 6953]
1269	[2169, 824]	3196	[2122, 2574]	5123	[6283, 1095]	7050	[6409, 6879]
1270	[2170, 2171]	3197	[4610, 4580]	5124	[6284, 5793]	7051	[5036, 7413]
1271	[2172, 1639]	3198	[2586, 4611]	5125	[3492, 2814]	7052	[7414, 6468]
1272	[2173, 1929]	3199	[4612, 4613]	5126	[6285, 6286]	7053	[7415, 6727]

1273	[2174, 2175]	3200	[2182, 2021]	5127	[6287, 5470]	7054	[1845, 659]
1274	[2176, 2177]	3201	[4470, 4205]	5128	[3462, 6288]	7055	[4104, 7416]
1275	[2178, 2179]	3202	[4149, 4614]	5129	[6289, 5974]	7056	[4839, 4324]
1276	[2180, 225]	3203	[4290, 4615]	5130	[3425, 96]	7057	[2173, 5103]
1277	[2181, 795]	3204	[12, 4616]	5131	[3234, 442]	7058	[6902, 1938]
1278	[884, 1661]	3205	[1741, 4617]	5132	[6290, 6291]	7059	[4066, 6974]
1279	[2182, 1651]	3206	[4618, 4619]	5133	[6032, 6292]	7060	[4373, 2285]
1280	[741, 2183]	3207	[4620, 4302]	5134	[6293, 342]	7061	[4882, 6714]
1281	[2184, 2185]	3208	[4621, 4343]	5135	[5762, 6272]	7062	[4543, 6456]
1282	[2186, 2187]	3209	[4622, 1730]	5136	[6294, 5853]	7063	[7417, 7418]
1283	[1619, 1841]	3210	[4623, 2141]	5137	[6295, 3930]	7064	[7419, 4946]
1284	[2188, 828]	3211	[4624, 4625]	5138	[6296, 3790]	7065	[1829, 7420]
1285	[2189, 2190]	3212	[1962, 236]	5139	[5479, 3403]	7066	[4209, 7421]
1286	[2191, 2192]	3213	[4169, 704]	5140	[3808, 6175]	7067	[6959, 3993]
1287	[2193, 2194]	3214	[4626, 4327]	5141	[6162, 6297]	7068	[7422, 7423]
1288	[1988, 201]	3215	[4627, 4628]	5142	[6298, 3089]	7069	[7424, 7425]
1289	[2195, 863]	3216	[4629, 1665]	5143	[3159, 5842]	7070	[2527, 4777]
1290	[2196, 2197]	3217	[4630, 2094]	5144	[3068, 388]	7071	[2138, 1789]
1291	[2198, 2199]	3218	[2553, 2327]	5145	[3144, 3783]	7072	[2079, 7426]
1292	[192, 2200]	3219	[4631, 1671]	5146	[6299, 6300]	7073	[2312, 4630]
1293	[35, 2201]	3220	[4149, 1780]	5147	[6301, 5860]	7074	[1844, 658]
1294	[1882, 1888]	3221	[4632, 798]	5148	[5814, 5885]	7075	[2061, 5248]
1295	[2202, 2203]	3222	[4633, 4634]	5149	[6302, 3349]	7076	[183, 4907]
1296	[2204, 2205]	3223	[4365, 2575]	5150	[6303, 5841]	7077	[6558, 7427]
1297	[2206, 864]	3224	[1938, 4635]	5151	[6304, 2646]	7078	[7428, 6910]
1298	[2207, 2208]	3225	[4636, 4637]	5152	[6305, 6306]	7079	[6423, 4360]
1299	[579, 209]	3226	[4182, 2134]	5153	[3245, 3011]	7080	[6706, 4702]
1300	[2209, 196]	3227	[4638, 4418]	5154	[3079, 3735]	7081	[6985, 5029]
1301	[2133, 2210]	3228	[4639, 4640]	5155	[3341, 6307]	7082	[5177, 4035]
1302	[506, 2211]	3229	[687, 4641]	5156	[6308, 5350]	7083	[4219, 7429]
1303	[1923, 2212]	3230	[4642, 1696]	5157	[1264, 426]	7084	[4126, 4396]
1304	[851, 2213]	3231	[4643, 4644]	5158	[6309, 1203]	7085	[3987, 794]
1305	[877, 2214]	3232	[4137, 4645]	5159	[69, 5331]	7086	[7417, 5250]
1306	[2215, 2216]	3233	[4646, 3972]	5160	[6310, 22]	7087	[7430, 7431]
1307	[2217, 2218]	3234	[774, 4647]	5161	[1310, 3501]	7088	[7432, 7433]
1308	[2219, 1711]	3235	[4648, 4649]	5162	[3658, 6051]	7089	[6474, 552]
1309	[2220, 848]	3236	[4650, 648]	5163	[3195, 6012]	7090	[1915, 6551]
1310	[1717, 607]	3237	[4651, 4652]	5164	[6311, 3355]	7091	[2422, 7434]
1311	[2221, 2222]	3238	[4653, 4654]	5165	[6312, 3690]	7092	[4259, 4948]
1312	[2223, 1819]	3239	[4655, 4363]	5166	[5447, 3500]	7093	[4504, 7435]
1313	[2224, 2225]	3240	[4020, 4656]	5167	[1125, 3289]	7094	[1853, 2181]
1314	[2226, 2021]	3241	[4657, 2197]	5168	[6290, 6313]	7095	[6876, 236]
1315	[2227, 1615]	3242	[566, 4658]	5169	[1557, 3323]	7096	[5259, 6700]
1316	[2228, 1840]	3243	[4659, 2145]	5170	[3807, 3102]	7097	[2344, 6477]

1317	[570, 2229]	3244	[4660, 4661]	5171	[3788, 431]	7098	[2104, 1694]
1318	[2230, 2231]	3245	[4304, 155]	5172	[6314, 5560]	7099	[6792, 740]
1319	[2232, 667]	3246	[4491, 2558]	5173	[1308, 1021]	7100	[510, 6885]
1320	[487, 1744]	3247	[2289, 1979]	5174	[6315, 6021]	7101	[6625, 4321]
1321	[2233, 2200]	3248	[2399, 4662]	5175	[1196, 5330]	7102	[6522, 7436]
1322	[2234, 2235]	3249	[4663, 2524]	5176	[6316, 6317]	7103	[7437, 2416]
1323	[833, 2236]	3250	[4664, 4665]	5177	[5954, 5370]	7104	[4448, 6837]
1324	[1864, 2237]	3251	[4528, 4666]	5178	[6318, 3908]	7105	[6805, 2588]
1325	[2238, 2239]	3252	[4397, 4667]	5179	[6319, 6320]	7106	[4413, 7438]
1326	[2240, 2112]	3253	[2566, 660]	5180	[6321, 6187]	7107	[7439, 7440]
1327	[2241, 2242]	3254	[4087, 4668]	5181	[6322, 1571]	7108	[6410, 5071]
1328	[2243, 2244]	3255	[626, 2204]	5182	[346, 5687]	7109	[7441, 4325]
1329	[55, 548]	3256	[4268, 4669]	5183	[6323, 6324]	7110	[4917, 6917]
1330	[2132, 639]	3257	[2298, 542]	5184	[6325, 355]	7111	[1806, 6397]
1331	[2245, 705]	3258	[4670, 4671]	5185	[6326, 6104]	7112	[7442, 4133]
1332	[2246, 2036]	3259	[495, 4672]	5186	[6327, 2736]	7113	[4354, 6788]
1333	[1893, 2247]	3260	[4673, 4674]	5187	[928, 3291]	7114	[2607, 4894]
1334	[2248, 2249]	3261	[4675, 4676]	5188	[3452, 6328]	7115	[6863, 4370]
1335	[2250, 2251]	3262	[4557, 2404]	5189	[6329, 5964]	7116	[6896, 2307]
1336	[2252, 1761]	3263	[234, 2426]	5190	[1379, 6330]	7117	[6859, 4241]
1337	[870, 1974]	3264	[2510, 4677]	5191	[3480, 272]	7118	[1735, 7443]
1338	[2253, 2254]	3265	[4678, 2073]	5192	[383, 3260]	7119	[2027, 4160]
1339	[2255, 1822]	3266	[4679, 4680]	5193	[343, 3460]	7120	[2220, 2484]
1340	[2256, 2257]	3267	[4681, 4682]	5194	[6331, 2877]	7121	[1790, 1989]
1341	[2258, 1848]	3268	[2228, 1619]	5195	[6082, 998]	7122	[1729, 4835]
1342	[2259, 2260]	3269	[4399, 4467]	5196	[6332, 5640]	7123	[888, 4757]
1343	[2261, 2262]	3270	[4683, 1829]	5197	[3435, 3228]	7124	[7444, 4980]
1344	[2263, 2264]	3271	[899, 4684]	5198	[6005, 5269]	7125	[6931, 2470]
1345	[2265, 2266]	3272	[775, 4685]	5199	[2763, 3423]	7126	[1710, 1936]
1346	[2267, 2268]	3273	[4277, 1676]	5200	[6333, 3688]	7127	[2365, 184]
1347	[2269, 2270]	3274	[2190, 4100]	5201	[6334, 5379]	7128	[5226, 5241]
1348	[2271, 2272]	3275	[4686, 4687]	5202	[6335, 399]	7129	[6679, 4896]
1349	[2273, 2274]	3276	[47, 4270]	5203	[5729, 3665]	7130	[7445, 7446]
1350	[2275, 853]	3277	[4664, 2066]	5204	[3375, 5363]	7131	[7447, 6486]
1351	[2276, 2277]	3278	[242, 4688]	5205	[6336, 6148]	7132	[6653, 2248]
1352	[2278, 2279]	3279	[4610, 700]	5206	[6337, 5637]	7133	[6844, 2182]
1353	[176, 2127]	3280	[2148, 51]	5207	[5772, 6338]	7134	[6925, 7448]
1354	[1764, 2280]	3281	[2150, 723]	5208	[433, 6339]	7135	[2565, 4102]
1355	[2281, 803]	3282	[4689, 4690]	5209	[3536, 5348]	7136	[762, 6756]
1356	[2282, 2283]	3283	[4647, 4691]	5210	[6181, 1417]	7137	[4996, 1658]
1357	[2284, 2285]	3284	[2224, 4692]	5211	[2998, 6340]	7138	[1637, 2336]
1358	[2286, 1864]	3285	[4693, 4694]	5212	[6341, 3787]	7139	[6896, 4169]
1359	[750, 2287]	3286	[4695, 4696]	5213	[5959, 6342]	7140	[4637, 7449]
1360	[2288, 2289]	3287	[731, 4697]	5214	[6343, 3186]	7141	[4339, 4044]

1361	[2233, 193]	3288	[4698, 2023]	5215	[5355, 6344]	7142	[6762, 4481]
1362	[2290, 2291]	3289	[2500, 4262]	5216	[1222, 5846]	7143	[4289, 4652]
1363	[2292, 559]	3290	[4032, 2109]	5217	[6345, 6346]	7144	[7450, 5224]
1364	[2293, 2294]	3291	[4699, 4700]	5218	[6347, 1227]	7145	[1696, 4826]
1365	[2295, 2296]	3292	[1642, 4701]	5219	[6348, 1084]	7146	[202, 6626]
1366	[1934, 207]	3293	[4702, 1937]	5220	[6135, 6349]	7147	[2317, 1873]
1367	[788, 1867]	3294	[4703, 852]	5221	[6292, 5519]	7148	[7451, 6663]
1368	[1871, 2077]	3295	[4704, 4029]	5222	[1448, 5265]	7149	[2110, 7452]
1369	[2297, 2274]	3296	[4705, 4706]	5223	[1525, 3831]	7150	[514, 2555]
1370	[2298, 2299]	3297	[672, 1654]	5224	[6350, 5812]	7151	[6861, 7453]
1371	[2300, 2301]	3298	[4707, 765]	5225	[5402, 953]	7152	[6862, 5143]
1372	[2302, 2303]	3299	[4708, 645]	5226	[6351, 3725]	7153	[4385, 4216]
1373	[2304, 2183]	3300	[797, 4709]	5227	[6352, 915]	7154	[6979, 4218]
1374	[2305, 235]	3301	[4694, 4710]	5228	[3108, 5659]	7155	[6750, 6918]
1375	[2306, 792]	3302	[827, 4711]	5229	[3200, 3216]	7156	[6512, 2298]
1376	[2307, 704]	3303	[889, 4239]	5230	[6353, 2950]	7157	[134, 4430]
1377	[2308, 2309]	3304	[4712, 693]	5231	[1003, 6354]	7158	[4260, 7454]
1378	[2310, 2311]	3305	[4713, 4714]	5232	[3253, 5893]	7159	[4201, 6390]
1379	[729, 2312]	3306	[4715, 4716]	5233	[6300, 3592]	7160	[7455, 7456]
1380	[2313, 2314]	3307	[4717, 2212]	5234	[958, 5750]	7161	[4748, 4713]
1381	[1954, 2315]	3308	[4718, 4487]	5235	[1553, 6355]	7162	[2551, 4407]
1382	[2316, 540]	3309	[4719, 1607]	5236	[6356, 6357]	7163	[2028, 7457]
1383	[2317, 2318]	3310	[4720, 4098]	5237	[6358, 5640]	7164	[7458, 2549]
1384	[2319, 179]	3311	[1919, 2087]	5238	[5990, 3928]	7165	[4556, 2403]
1385	[2320, 2321]	3312	[488, 4721]	5239	[6359, 6148]	7166	[5134, 6547]
1386	[2322, 2323]	3313	[2560, 163]	5240	[6360, 5429]	7167	[4992, 4615]
1387	[1788, 2139]	3314	[4722, 4723]	5241	[2808, 5564]	7168	[7459, 7460]
1388	[2324, 2325]	3315	[4452, 4724]	5242	[6361, 5774]	7169	[6637, 6697]
1389	[557, 2326]	3316	[4067, 2127]	5243	[3272, 1336]	7170	[2152, 4749]
1390	[2327, 2328]	3317	[4725, 4726]	5244	[6362, 6363]	7171	[5197, 4044]
1391	[2329, 2330]	3318	[831, 4727]	5245	[2736, 375]	7172	[5248, 6943]
1392	[2331, 2332]	3319	[4728, 4312]	5246	[6364, 1094]	7173	[3960, 4727]
1393	[200, 2333]	3320	[4488, 643]	5247	[6365, 6366]	7174	[4867, 4975]
1394	[2334, 2335]	3321	[2484, 2043]	5248	[104, 3448]	7175	[5249, 7418]
1395	[888, 536]	3322	[4482, 2254]	5249	[351, 5994]	7176	[7461, 6787]
1396	[2336, 2337]	3323	[4405, 4729]	5250	[5933, 5638]	7177	[4893, 7462]
1397	[777, 497]	3324	[2562, 2488]	5251	[6367, 1585]	7178	[2006, 4307]
1398	[2338, 666]	3325	[4730, 2150]	5252	[6247, 967]	7179	[4450, 1638]
1399	[196, 2339]	3326	[4731, 4732]	5253	[370, 1122]	7180	[1816, 5045]
1400	[2340, 2341]	3327	[3957, 1953]	5254	[6368, 2918]	7181	[4027, 4839]
1401	[2342, 2343]	3328	[890, 4240]	5255	[6369, 3643]	7182	[1825, 2176]
1402	[2105, 880]	3329	[4733, 4734]	5256	[3049, 1498]	7183	[6676, 2374]
1403	[2344, 2345]	3330	[4735, 4736]	5257	[6370, 6371]	7184	[4971, 5222]
1404	[2346, 2347]	3331	[2369, 4684]	5258	[6049, 1560]	7185	[6590, 6807]

1405	[2348, 2349]	3332	[4737, 4199]	5259	[6372, 286]	7186	[6972, 7463]
1406	[2350, 2030]	3333	[2176, 1727]	5260	[6373, 523]	7187	[4870, 602]
1407	[2009, 1932]	3334	[4406, 2552]	5261	[6374, 4989]	7188	[6721, 6811]
1408	[2351, 160]	3335	[4738, 4739]	5262	[6375, 4093]	7189	[7464, 4631]
1409	[2352, 2353]	3336	[4740, 515]	5263	[6376, 5083]	7190	[4169, 2245]
1410	[634, 2354]	3337	[4010, 4741]	5264	[6377, 642]	7191	[1616, 4320]
1411	[2355, 2356]	3338	[2199, 4742]	5265	[1978, 4099]	7192	[4576, 144]
1412	[2357, 2358]	3339	[4743, 890]	5266	[1715, 4217]	7193	[7465, 7466]
1413	[2359, 2048]	3340	[2526, 4744]	5267	[6378, 6379]	7194	[4766, 136]
1414	[230, 710]	3341	[503, 1966]	5268	[2520, 2163]	7195	[6802, 6558]
1415	[2360, 2361]	3342	[4580, 1714]	5269	[5107, 4611]	7196	[1968, 6970]
1416	[2175, 2362]	3343	[4745, 1779]	5270	[6380, 6381]	7197	[2181, 4367]
1417	[2363, 2364]	3344	[4746, 606]	5271	[4513, 4651]	7198	[4853, 2599]
1418	[2365, 1729]	3345	[4747, 4748]	5272	[4022, 4673]	7199	[6688, 6772]
1419	[2366, 2367]	3346	[4062, 4119]	5273	[6382, 6383]	7200	[4936, 6994]
1420	[2368, 2216]	3347	[2567, 4283]	5274	[1813, 2388]	7201	[760, 5005]
1421	[2369, 900]	3348	[1691, 2600]	5275	[4181, 5138]	7202	[7001, 223]
1422	[2119, 2370]	3349	[4749, 1695]	5276	[6384, 4723]	7203	[6975, 4658]
1423	[562, 753]	3350	[4750, 810]	5277	[6385, 173]	7204	[4210, 7467]
1424	[2371, 2372]	3351	[4309, 4751]	5278	[2321, 2527]	7205	[4232, 243]
1425	[2373, 2374]	3352	[4752, 562]	5279	[1783, 6386]	7206	[7459, 6614]
1426	[2375, 2226]	3353	[4753, 2083]	5280	[4781, 6387]	7207	[5056, 6419]
1427	[2376, 2377]	3354	[2186, 2460]	5281	[6388, 6389]	7208	[6763, 696]
1428	[2378, 2379]	3355	[4291, 4754]	5282	[2363, 6390]	7209	[4956, 1747]
1429	[577, 37]	3356	[4755, 4243]	5283	[6391, 809]	7210	[1841, 7468]
1430	[575, 787]	3357	[639, 138]	5284	[6392, 4843]	7211	[730, 4630]
1431	[868, 867]	3358	[4756, 4757]	5285	[6393, 4512]	7212	[6399, 2185]
1432	[1881, 1887]	3359	[4758, 898]	5286	[5133, 6394]	7213	[4887, 4454]
1433	[2380, 196]	3360	[2312, 747]	5287	[6395, 4270]	7214	[7469, 729]
1434	[2381, 2225]	3361	[4759, 4265]	5288	[4506, 658]	7215	[2385, 6433]
1435	[2288, 1978]	3362	[4760, 2347]	5289	[5220, 2115]	7216	[6907, 2203]
1436	[489, 2382]	3363	[2594, 4761]	5290	[4812, 6396]	7217	[7470, 4876]
1437	[2383, 2384]	3364	[4762, 4763]	5291	[6397, 6398]	7218	[2488, 6818]
1438	[2385, 1931]	3365	[3953, 4764]	5292	[6399, 2602]	7219	[5103, 6506]
1439	[684, 2386]	3366	[2341, 4765]	5293	[4730, 722]	7220	[7471, 7472]
1440	[2387, 2388]	3367	[4766, 8]	5294	[887, 4756]	7221	[4931, 7473]
1441	[875, 2389]	3368	[4767, 4339]	5295	[6400, 4352]	7222	[7474, 6809]
1442	[853, 2390]	3369	[634, 2054]	5296	[1821, 2547]	7223	[4306, 7475]
1443	[2391, 2392]	3370	[4768, 763]	5297	[4281, 4116]	7224	[7476, 7477]
1444	[547, 2393]	3371	[4769, 678]	5298	[6401, 4088]	7225	[7450, 4286]
1445	[2394, 2395]	3372	[4770, 4771]	5299	[4320, 6402]	7226	[2323, 7478]
1446	[1613, 2303]	3373	[4772, 531]	5300	[6403, 6404]	7227	[7479, 6699]
1447	[2396, 2397]	3374	[2011, 4773]	5301	[4453, 4786]	7228	[6745, 4209]
1448	[863, 2398]	3375	[777, 160]	5302	[4372, 4958]	7229	[7480, 7471]

1449	[2399, 2400]	3376	[4774, 2229]	5303	[6405, 5087]	7230	[6480, 2064]
1450	[2401, 2402]	3377	[4775, 4776]	5304	[6384, 6406]	7231	[1980, 6966]
1451	[2403, 2404]	3378	[4468, 4777]	5305	[6407, 6408]	7232	[6453, 4877]
1452	[2205, 2405]	3379	[4778, 2522]	5306	[5136, 5143]	7233	[775, 4691]
1453	[1964, 2291]	3380	[669, 4529]	5307	[6409, 1783]	7234	[4621, 6465]
1454	[2406, 2407]	3381	[4779, 4780]	5308	[6410, 5010]	7235	[4225, 2366]
1455	[2408, 630]	3382	[4781, 4782]	5309	[6411, 4676]	7236	[6488, 4726]
1456	[1772, 1653]	3383	[3998, 4783]	5310	[3982, 6412]	7237	[4324, 2198]
1457	[2409, 2410]	3384	[2417, 3997]	5311	[1668, 2471]	7238	[6671, 2290]
1458	[2411, 2412]	3385	[4784, 4785]	5312	[4419, 2294]	7239	[4819, 6685]
1459	[1653, 2041]	3386	[4724, 4786]	5313	[2240, 713]	7240	[4178, 4551]
1460	[2413, 2414]	3387	[4787, 4788]	5314	[5018, 6413]	7241	[2275, 60]
1461	[2415, 2416]	3388	[2355, 4789]	5315	[6414, 132]	7242	[5040, 7481]
1462	[2417, 2007]	3389	[4790, 4791]	5316	[707, 4739]	7243	[6429, 2421]
1463	[2418, 2419]	3390	[4484, 2158]	5317	[4146, 5052]	7244	[7482, 7483]
1464	[2387, 1814]	3391	[4792, 4793]	5318	[494, 585]	7245	[4878, 6762]
1465	[2420, 2421]	3392	[2587, 1798]	5319	[4203, 6415]	7246	[6466, 1997]
1466	[2422, 2423]	3393	[2145, 4214]	5320	[1793, 4880]	7247	[7484, 7471]
1467	[2424, 2425]	3394	[533, 1973]	5321	[1822, 4860]	7248	[7485, 6446]
1468	[2426, 802]	3395	[4794, 2345]	5322	[4624, 2309]	7249	[7486, 183]
1469	[2427, 2428]	3396	[4795, 4796]	5323	[6416, 2221]	7250	[5081, 6861]
1470	[2429, 2430]	3397	[4797, 4798]	5324	[2513, 5057]	7251	[4120, 840]
1471	[2431, 204]	3398	[4799, 4800]	5325	[6417, 6418]	7252	[7487, 7488]
1472	[794, 2432]	3399	[4801, 4802]	5326	[5067, 2261]	7253	[2046, 7489]
1473	[2433, 2434]	3400	[4803, 4581]	5327	[4401, 4246]	7254	[5090, 6775]
1474	[2269, 2277]	3401	[4804, 1919]	5328	[804, 661]	7255	[6391, 6604]
1475	[2435, 2436]	3402	[1702, 4382]	5329	[4105, 6419]	7256	[7490, 5054]
1476	[2437, 2438]	3403	[239, 2037]	5330	[2283, 6420]	7257	[7491, 7492]
1477	[2439, 2440]	3404	[4054, 876]	5331	[136, 6421]	7258	[3987, 1859]
1478	[2441, 2442]	3405	[4805, 502]	5332	[4719, 5220]	7259	[5230, 124]
1479	[2443, 2444]	3406	[1948, 2238]	5333	[6422, 4917]	7260	[4519, 4771]
1480	[2445, 2446]	3407	[4670, 3974]	5334	[4538, 2486]	7261	[2605, 6723]
1481	[578, 493]	3408	[4806, 4514]	5335	[1728, 184]	7262	[4356, 1831]
1482	[2447, 2448]	3409	[4807, 517]	5336	[4660, 5190]	7263	[7493, 6428]
1483	[1960, 2449]	3410	[2572, 2289]	5337	[4985, 1800]	7264	[6835, 7494]
1484	[2450, 2451]	3411	[890, 4808]	5338	[4474, 730]	7265	[6656, 1838]
1485	[2097, 2452]	3412	[4809, 4810]	5339	[6423, 6424]	7266	[139, 6886]
1486	[2453, 2454]	3413	[4811, 1636]	5340	[758, 6425]	7267	[1789, 7495]
1487	[2293, 2455]	3414	[4812, 4813]	5341	[2461, 6426]	7268	[5255, 2013]
1488	[2456, 1679]	3415	[4814, 4815]	5342	[4755, 2003]	7269	[7496, 1833]
1489	[2457, 2458]	3416	[4653, 4816]	5343	[6427, 6428]	7270	[2463, 719]
1490	[2459, 2460]	3417	[4578, 4061]	5344	[6429, 6430]	7271	[4088, 7497]
1491	[2461, 2462]	3418	[778, 4817]	5345	[2588, 1799]	7272	[1617, 7498]
1492	[2463, 2464]	3419	[1730, 554]	5346	[2472, 2175]	7273	[7499, 4876]

1493	[2465, 2466]	3420	[4818, 4819]	5347	[4615, 5036]	7274	[7500, 4805]
1494	[491, 2467]	3421	[4820, 1910]	5348	[1638, 5219]	7275	[49, 6779]
1495	[2468, 2469]	3422	[814, 4821]	5349	[6431, 4204]	7276	[4064, 7426]
1496	[2470, 2471]	3423	[4257, 4570]	5350	[2354, 4422]	7277	[2563, 7501]
1497	[2472, 2473]	3424	[4822, 4823]	5351	[2401, 6432]	7278	[7502, 4785]
1498	[14, 2474]	3425	[4824, 4514]	5352	[6433, 6434]	7279	[7503, 6493]
1499	[2475, 2088]	3426	[2234, 866]	5353	[6435, 6436]	7280	[7504, 7505]
1500	[2163, 2476]	3427	[4825, 4826]	5354	[6437, 3999]	7281	[2547, 4860]
1501	[576, 1889]	3428	[4827, 1842]	5355	[4361, 4694]	7282	[7506, 6889]
1502	[2477, 2478]	3429	[4800, 2268]	5356	[4019, 4455]	7283	[7396, 6521]
1503	[2479, 2480]	3430	[156, 4828]	5357	[235, 802]	7284	[4355, 7507]
1504	[2481, 2482]	3431	[4829, 4830]	5358	[2577, 5123]	7285	[6663, 6499]
1505	[658, 2483]	3432	[4831, 894]	5359	[4353, 5232]	7286	[7508, 4370]
1506	[2095, 2165]	3433	[4832, 4463]	5360	[6438, 6439]	7287	[3978, 4306]
1507	[2484, 2485]	3434	[4833, 4834]	5361	[4380, 2386]	7288	[6746, 4015]
1508	[2383, 2486]	3435	[4835, 212]	5362	[6440, 6441]	7289	[6398, 2060]
1509	[2487, 2488]	3436	[838, 2339]	5363	[667, 4041]	7290	[4804, 2086]
1510	[2489, 2490]	3437	[4836, 1932]	5364	[6442, 892]	7291	[4848, 7509]
1511	[2491, 2492]	3438	[4837, 4838]	5365	[4908, 4914]	7292	[5159, 7510]
1512	[2493, 2494]	3439	[2131, 4465]	5366	[2265, 4177]	7293	[5088, 7511]
1513	[2091, 2495]	3440	[58, 4839]	5367	[4980, 6443]	7294	[1796, 6912]
1514	[1864, 2496]	3441	[4196, 2214]	5368	[1868, 5039]	7295	[2190, 9]
1515	[688, 2497]	3442	[4840, 4841]	5369	[6444, 2593]	7296	[6845, 7510]
1516	[2498, 2499]	3443	[4842, 4843]	5370	[6445, 6446]	7297	[4806, 5172]
1517	[2500, 2501]	3444	[4844, 4845]	5371	[4684, 2565]	7298	[4970, 7453]
1518	[2502, 1812]	3445	[4846, 4296]	5372	[759, 6447]	7299	[6879, 6386]
1519	[2503, 1947]	3446	[4847, 624]	5373	[6448, 6449]	7300	[4866, 2435]
1520	[2504, 2505]	3447	[4388, 4058]	5374	[1835, 5088]	7301	[4227, 5106]
1521	[2506, 2507]	3448	[865, 2235]	5375	[6450, 1854]	7302	[4239, 4808]
1522	[2508, 1656]	3449	[1750, 2130]	5376	[5201, 6451]	7303	[6783, 1776]
1523	[2509, 2510]	3450	[4016, 4848]	5377	[4439, 6452]	7304	[2491, 7512]
1524	[1674, 2511]	3451	[1749, 1846]	5378	[6453, 6454]	7305	[6911, 6971]
1525	[154, 2512]	3452	[4738, 1941]	5379	[4972, 4654]	7306	[7400, 7513]
1526	[2513, 2514]	3453	[805, 4849]	5380	[1895, 6455]	7307	[2458, 2148]
1527	[2515, 2516]	3454	[4850, 4851]	5381	[4221, 1660]	7308	[6430, 1644]
1528	[1662, 1878]	3455	[1912, 4852]	5382	[4143, 6456]	7309	[6414, 1870]
1529	[2517, 2518]	3456	[4853, 1691]	5383	[4829, 3989]	7310	[4243, 4904]
1530	[2519, 2028]	3457	[2035, 2530]	5384	[832, 6457]	7311	[7514, 7456]
1531	[2520, 2039]	3458	[2283, 1999]	5385	[1987, 200]	7312	[4743, 4239]
1532	[2521, 2522]	3459	[4050, 4854]	5386	[4340, 6458]	7313	[6963, 6854]
1533	[2523, 2524]	3460	[4855, 4856]	5387	[1630, 6459]	7314	[7515, 6649]
1534	[2525, 2526]	3461	[4857, 4858]	5388	[6460, 4897]	7315	[7516, 240]
1535	[2527, 2528]	3462	[4293, 2039]	5389	[4416, 5086]	7316	[4234, 6449]
1536	[2529, 2042]	3463	[1703, 736]	5390	[6461, 6462]	7317	[5080, 7517]

1537	[2246, 2530]	3464	[4275, 2160]	5391	[6463, 4337]	7318	[7518, 7519]
1538	[1805, 2531]	3465	[4567, 4859]	5392	[668, 4528]	7319	[4683, 4229]
1539	[2532, 2533]	3466	[4860, 4861]	5393	[6463, 6464]	7320	[852, 7520]
1540	[2534, 801]	3467	[4862, 2327]	5394	[4342, 6465]	7321	[4868, 2494]
1541	[2535, 1950]	3468	[4008, 615]	5395	[6466, 4471]	7322	[2054, 6800]
1542	[2536, 2511]	3469	[4863, 4864]	5396	[6467, 6468]	7323	[4948, 7454]
1543	[2537, 2102]	3470	[4317, 4865]	5397	[6469, 4619]	7324	[6515, 4716]
1544	[2143, 2167]	3471	[4288, 4651]	5398	[6470, 1969]	7325	[6669, 6478]
1545	[2145, 2469]	3472	[4866, 4867]	5399	[5185, 6471]	7326	[1870, 2076]
1546	[2538, 609]	3473	[4507, 4226]	5400	[4851, 6472]	7327	[4224, 7521]
1547	[564, 2539]	3474	[233, 2262]	5401	[4754, 6473]	7328	[6871, 6661]
1548	[794, 1860]	3475	[231, 1643]	5402	[6474, 6475]	7329	[6909, 7522]
1549	[2540, 703]	3476	[4787, 4841]	5403	[6476, 5254]	7330	[7523, 6899]
1550	[2487, 2541]	3477	[4868, 4869]	5404	[4794, 6477]	7331	[645, 6775]
1551	[2064, 657]	3478	[1753, 4865]	5405	[4707, 4096]	7332	[5199, 4761]
1552	[2542, 2543]	3479	[4870, 748]	5406	[6478, 157]	7333	[528, 6397]
1553	[2544, 2545]	3480	[4871, 538]	5407	[6479, 4516]	7334	[7524, 4332]
1554	[681, 2546]	3481	[4627, 593]	5408	[6480, 656]	7335	[6950, 6712]
1555	[576, 586]	3482	[4872, 4873]	5409	[4846, 4449]	7336	[2552, 7525]
1556	[2132, 137]	3483	[1651, 4190]	5410	[6481, 5122]	7337	[4486, 6836]
1557	[2547, 2548]	3484	[4874, 4875]	5411	[6482, 5113]	7338	[597, 6625]
1558	[2549, 2550]	3485	[4876, 4877]	5412	[6483, 6484]	7339	[2202, 6908]
1559	[2551, 2552]	3486	[4647, 4685]	5413	[5258, 4451]	7340	[488, 6489]
1560	[1845, 2483]	3487	[4878, 4464]	5414	[1929, 5104]	7341	[1725, 7526]
1561	[2553, 646]	3488	[4879, 4568]	5415	[900, 2067]	7342	[7527, 4591]
1562	[2196, 2554]	3489	[4183, 4880]	5416	[6485, 6486]	7343	[4821, 7528]
1563	[2555, 2556]	3490	[4881, 511]	5417	[6487, 2149]	7344	[6465, 7529]
1564	[2557, 2558]	3491	[1698, 756]	5418	[1701, 4729]	7345	[7530, 2571]
1565	[191, 2559]	3492	[4882, 532]	5419	[6488, 5040]	7346	[6550, 7531]
1566	[2560, 2561]	3493	[4883, 215]	5420	[1744, 6489]	7347	[559, 7438]
1567	[2562, 2541]	3494	[4884, 4656]	5421	[607, 6490]	7348	[1976, 6592]
1568	[2563, 2564]	3495	[4885, 4598]	5422	[2300, 5189]	7349	[6877, 6785]
1569	[2565, 2068]	3496	[4573, 807]	5423	[216, 1705]	7350	[4925, 1607]
1570	[2566, 175]	3497	[4757, 537]	5424	[4885, 4644]	7351	[6820, 2610]
1571	[2567, 1689]	3498	[4886, 4661]	5425	[2602, 5015]	7352	[2535, 5061]
1572	[2568, 2569]	3499	[4887, 668]	5426	[4632, 4827]	7353	[7508, 4329]
1573	[1652, 1773]	3500	[1706, 4888]	5427	[6491, 4377]	7354	[5030, 6654]
1574	[2570, 2571]	3501	[4889, 4890]	5428	[6483, 6492]	7355	[6939, 7532]
1575	[552, 2572]	3502	[1764, 4341]	5429	[4646, 1906]	7356	[4726, 7481]
1576	[1822, 2548]	3503	[4891, 4690]	5430	[6493, 6494]	7357	[652, 6744]
1577	[2573, 2574]	3504	[4892, 2018]	5431	[2532, 6495]	7358	[7533, 1856]
1578	[2575, 2091]	3505	[4774, 571]	5432	[1692, 4053]	7359	[4476, 6929]
1579	[810, 1900]	3506	[2518, 4893]	5433	[4702, 6496]	7360	[7534, 7535]
1580	[2576, 668]	3507	[697, 4894]	5434	[2555, 6497]	7361	[6395, 45]

1581	[2577, 2578]	3508	[4895, 4255]	5435	[1744, 4721]	7362	[6416, 6673]
1582	[2579, 2580]	3509	[1878, 1700]	5436	[4347, 1827]	7363	[1636, 6778]
1583	[1755, 2581]	3510	[4271, 4896]	5437	[6498, 4440]	7364	[5241, 7536]
1584	[2582, 531]	3511	[4218, 4490]	5438	[6499, 6492]	7365	[2260, 4713]
1585	[2583, 2584]	3512	[782, 4897]	5439	[4979, 4138]	7366	[635, 7537]
1586	[2585, 2586]	3513	[4898, 4899]	5440	[2267, 6500]	7367	[1709, 6706]
1587	[709, 231]	3514	[135, 8]	5441	[6501, 4316]	7368	[500, 831]
1588	[2587, 2588]	3515	[4900, 797]	5442	[6502, 4083]	7369	[4409, 6426]
1589	[2589, 2590]	3516	[2384, 3955]	5443	[5078, 2098]	7370	[4376, 6928]
1590	[2591, 2251]	3517	[4901, 2518]	5444	[4695, 1708]	7371	[4876, 6454]
1591	[2592, 2593]	3518	[4902, 4903]	5445	[6503, 6504]	7372	[7538, 1945]
1592	[2594, 2595]	3519	[4100, 10]	5446	[6505, 4187]	7373	[4757, 6769]
1593	[2350, 2596]	3520	[238, 165]	5447	[214, 5091]	7374	[7539, 1951]
1594	[45, 2597]	3521	[4904, 4905]	5448	[805, 662]	7375	[7540, 4719]
1595	[1791, 2598]	3522	[4906, 4907]	5449	[6506, 6507]	7376	[2498, 2396]
1596	[1702, 2437]	3523	[1877, 1663]	5450	[5082, 6508]	7377	[7541, 6843]
1597	[2599, 2600]	3524	[4908, 4527]	5451	[6509, 4948]	7378	[7542, 6905]
1598	[633, 1803]	3525	[2428, 761]	5452	[6510, 156]	7379	[7543, 2440]
1599	[769, 2601]	3526	[4909, 126]	5453	[4970, 6511]	7380	[2139, 7495]
1600	[2184, 2602]	3527	[4910, 4911]	5454	[4642, 4825]	7381	[1997, 4472]
1601	[2603, 2604]	3528	[4216, 1716]	5455	[6512, 541]	7382	[4370, 6751]
1602	[2605, 2606]	3529	[4279, 4912]	5456	[6513, 6514]	7383	[4044, 6458]
1603	[2607, 698]	3530	[4195, 4913]	5457	[2437, 4383]	7384	[7544, 7545]
1604	[2608, 2609]	3531	[4526, 4914]	5458	[4381, 4825]	7385	[2258, 6544]
1605	[2610, 2034]	3532	[4915, 4916]	5459	[592, 4628]	7386	[6926, 4546]
1606	[2611, 2612]	3533	[4917, 4057]	5460	[4316, 2370]	7387	[4174, 7546]
1607	[2613, 2614]	3534	[4918, 2434]	5461	[4168, 2307]	7388	[7547, 2761]
1608	[465, 1146]	3535	[4919, 4920]	5462	[1823, 6471]	7389	[7548, 981]
1609	[2615, 2616]	3536	[4921, 4922]	5463	[6515, 6516]	7390	[6191, 5751]
1610	[2617, 2618]	3537	[4923, 2255]	5464	[2023, 6517]	7391	[7549, 5590]
1611	[2619, 2620]	3538	[4924, 4925]	5465	[4717, 1924]	7392	[7550, 6193]
1612	[930, 2621]	3539	[4926, 4927]	5466	[6518, 4974]	7393	[3501, 5421]
1613	[340, 2622]	3540	[1903, 2414]	5467	[4345, 4682]	7394	[7551, 5872]
1614	[2623, 2624]	3541	[4928, 4929]	5468	[4496, 4753]	7395	[478, 6176]
1615	[2625, 2626]	3542	[4930, 4931]	5469	[6519, 2217]	7396	[7552, 3091]
1616	[2627, 2628]	3543	[3973, 4671]	5470	[6520, 6521]	7397	[1465, 3018]
1617	[2629, 75]	3544	[4932, 4398]	5471	[1786, 4997]	7398	[5863, 2635]
1618	[2630, 2631]	3545	[4756, 536]	5472	[6522, 4744]	7399	[1046, 7108]
1619	[2632, 468]	3546	[4933, 4934]	5473	[6523, 4323]	7400	[3736, 374]
1620	[2633, 318]	3547	[4935, 4390]	5474	[6398, 5000]	7401	[3883, 7093]
1621	[1562, 2634]	3548	[4936, 4649]	5475	[6524, 6525]	7402	[7553, 277]
1622	[2635, 1311]	3549	[4530, 4937]	5476	[6526, 2507]	7403	[3239, 5821]
1623	[2636, 2637]	3550	[806, 4574]	5477	[6527, 545]	7404	[7554, 2849]
1624	[1088, 1440]	3551	[4938, 4939]	5478	[841, 4371]	7405	[6342, 7555]

1625	[945, 2638]	3552	[4940, 4941]	5479	[1901, 5171]	7406	[991, 3767]
1626	[2639, 2640]	3553	[4942, 4600]	5480	[1916, 6528]	7407	[7556, 7557]
1627	[2641, 2642]	3554	[4943, 4944]	5481	[1684, 2272]	7408	[7086, 2860]
1628	[2643, 2644]	3555	[4164, 4460]	5482	[6529, 6530]	7409	[3432, 3889]
1629	[2645, 2646]	3556	[2591, 4297]	5483	[6531, 6532]	7410	[7558, 3899]
1630	[940, 2647]	3557	[4433, 4945]	5484	[4413, 560]	7411	[2912, 5434]
1631	[1215, 2648]	3558	[3969, 4821]	5485	[2583, 1876]	7412	[6098, 962]
1632	[2649, 249]	3559	[4946, 242]	5486	[6533, 6534]	7413	[3649, 7559]
1633	[2650, 1299]	3560	[4947, 2070]	5487	[849, 2050]	7414	[7560, 7283]
1634	[271, 462]	3561	[4948, 4949]	5488	[4921, 6535]	7415	[3841, 1019]
1635	[298, 2651]	3562	[4950, 1785]	5489	[1996, 4471]	7416	[3319, 5947]
1636	[1114, 2652]	3563	[2409, 4525]	5490	[5111, 4497]	7417	[3379, 3217]
1637	[2653, 407]	3564	[4086, 4468]	5491	[748, 603]	7418	[7561, 1102]
1638	[2654, 1423]	3565	[3960, 832]	5492	[6536, 6537]	7419	[3517, 5277]
1639	[1034, 923]	3566	[4951, 4462]	5493	[6538, 3983]	7420	[5676, 7562]
1640	[425, 2655]	3567	[2503, 4559]	5494	[2588, 6539]	7421	[5731, 7563]
1641	[2656, 2657]	3568	[4952, 4953]	5495	[6540, 2064]	7422	[7564, 3023]
1642	[2658, 2659]	3569	[4477, 4954]	5496	[1849, 3991]	7423	[906, 5431]
1643	[456, 2660]	3570	[4955, 4874]	5497	[6541, 5153]	7424	[358, 1109]
1644	[1033, 77]	3571	[4302, 4135]	5498	[5170, 6542]	7425	[3464, 7140]
1645	[2661, 1565]	3572	[4956, 616]	5499	[4995, 1835]	7426	[7565, 5776]
1646	[2662, 2663]	3573	[1639, 4957]	5500	[6543, 6494]	7427	[7145, 979]
1647	[2664, 2665]	3574	[4862, 646]	5501	[1847, 6544]	7428	[7566, 5669]
1648	[2666, 2667]	3575	[4827, 799]	5502	[6545, 6504]	7429	[7357, 2858]
1649	[2668, 2669]	3576	[4214, 52]	5503	[6546, 5100]	7430	[3404, 7081]
1650	[1038, 80]	3577	[4244, 1967]	5504	[4803, 4442]	7431	[7567, 7371]
1651	[2670, 1399]	3578	[2575, 4420]	5505	[1863, 5216]	7432	[7568, 2897]
1652	[2671, 2672]	3579	[4958, 2356]	5506	[4472, 6547]	7433	[7569, 7570]
1653	[2673, 916]	3580	[4959, 4903]	5507	[2104, 4749]	7434	[7571, 7037]
1654	[1349, 1067]	3581	[2348, 4960]	5508	[2042, 4007]	7435	[1343, 7572]
1655	[2674, 2675]	3582	[4762, 4961]	5509	[1859, 2432]	7436	[5865, 6355]
1656	[2676, 2677]	3583	[2380, 838]	5510	[6548, 4060]	7437	[1054, 6036]
1657	[2678, 2679]	3584	[4962, 4602]	5511	[4185, 4973]	7438	[3579, 3014]
1658	[2680, 2681]	3585	[4963, 4964]	5512	[1965, 504]	7439	[7573, 1535]
1659	[2682, 2683]	3586	[4965, 4172]	5513	[4380, 6549]	7440	[7574, 6155]
1660	[2684, 2685]	3587	[4966, 4967]	5514	[4202, 6550]	7441	[7575, 2798]
1661	[2686, 2687]	3588	[4968, 4969]	5515	[2366, 6551]	7442	[5592, 362]
1662	[921, 1493]	3589	[714, 4970]	5516	[6552, 2045]	7443	[1195, 2756]
1663	[2688, 2689]	3590	[4971, 2444]	5517	[2469, 4215]	7444	[7576, 5835]
1664	[2690, 2691]	3591	[4972, 4816]	5518	[4294, 4756]	7445	[967, 7029]
1665	[2692, 2693]	3592	[2248, 4973]	5519	[6553, 2190]	7446	[7214, 7577]
1666	[2694, 2695]	3593	[4532, 4974]	5520	[6554, 6555]	7447	[7578, 7096]
1667	[2696, 89]	3594	[844, 4049]	5521	[6556, 4893]	7448	[5631, 6339]
1668	[1051, 2697]	3595	[2278, 4645]	5522	[6557, 5144]	7449	[7225, 7579]

1669	[2698, 2699]	3596	[4855, 41]	5523	[4173, 6558]	7450	[7324, 1215]
1670	[2700, 2701]	3597	[2435, 4975]	5524	[718, 2464]	7451	[1586, 5264]
1671	[2702, 2703]	3598	[4928, 4976]	5525	[2324, 6559]	7452	[7580, 7127]
1672	[2704, 2705]	3599	[4023, 1743]	5526	[4615, 4754]	7453	[1602, 2786]
1673	[2706, 2707]	3600	[3959, 831]	5527	[186, 5164]	7454	[965, 7581]
1674	[1105, 2708]	3601	[4977, 4641]	5528	[6560, 2549]	7455	[344, 3841]
1675	[2612, 2709]	3602	[2031, 4978]	5529	[1612, 1623]	7456	[1029, 1394]
1676	[2710, 1347]	3603	[4481, 4813]	5530	[2557, 4492]	7457	[1542, 3061]
1677	[2711, 2712]	3604	[4979, 1944]	5531	[6561, 6562]	7458	[7582, 3648]
1678	[2713, 2714]	3605	[4980, 4920]	5532	[6563, 1994]	7459	[7583, 1458]
1679	[2715, 2716]	3606	[4428, 4504]	5533	[2589, 4613]	7460	[1561, 3302]
1680	[2637, 2717]	3607	[4981, 4982]	5534	[4900, 613]	7461	[6298, 1467]
1681	[2718, 2719]	3608	[823, 4983]	5535	[4720, 6564]	7462	[5836, 7584]
1682	[1280, 1364]	3609	[4076, 611]	5536	[4963, 6379]	7463	[7585, 1009]
1683	[2720, 2721]	3610	[4984, 4149]	5537	[4641, 6565]	7464	[2827, 6252]
1684	[2722, 2723]	3611	[4985, 1698]	5538	[5006, 2505]	7465	[7228, 3872]
1685	[1070, 1447]	3612	[4552, 4986]	5539	[4942, 6566]	7466	[7586, 6218]
1686	[2724, 2725]	3613	[178, 4987]	5540	[1738, 5118]	7467	[415, 5692]
1687	[2726, 2727]	3614	[4988, 4989]	5541	[6567, 2429]	7468	[468, 7587]
1688	[2728, 2729]	3615	[4990, 4827]	5542	[6568, 2513]	7469	[3599, 6264]
1689	[341, 2730]	3616	[4991, 4328]	5543	[5145, 6459]	7470	[334, 5652]
1690	[2731, 2732]	3617	[4992, 4291]	5544	[6569, 4008]	7471	[3625, 928]
1691	[2733, 2734]	3618	[4993, 4596]	5545	[4157, 4848]	7472	[6307, 7588]
1692	[2735, 2736]	3619	[162, 2561]	5546	[4643, 4598]	7473	[5882, 7589]
1693	[1066, 1350]	3620	[4729, 4382]	5547	[1936, 6496]	7474	[478, 7316]
1694	[2737, 1423]	3621	[880, 4994]	5548	[6570, 6571]	7475	[7590, 7591]
1695	[2634, 2738]	3622	[4995, 4996]	5549	[1737, 4307]	7476	[119, 1060]
1696	[2739, 1051]	3623	[3980, 2244]	5550	[2378, 2058]	7477	[5696, 3855]
1697	[2740, 2741]	3624	[4997, 4998]	5551	[854, 4019]	7478	[5426, 7592]
1698	[2742, 2743]	3625	[641, 4999]	5552	[6572, 6573]	7479	[7593, 5790]
1699	[2744, 253]	3626	[2456, 1624]	5553	[2010, 6574]	7480	[5425, 7169]
1700	[1493, 1088]	3627	[618, 5000]	5554	[6575, 4412]	7481	[3594, 6077]
1701	[2745, 1038]	3628	[5001, 5002]	5555	[6482, 5125]	7482	[2941, 5386]
1702	[2746, 111]	3629	[5003, 5004]	5556	[6576, 6577]	7483	[5738, 7558]
1703	[2747, 1349]	3630	[2428, 5005]	5557	[4066, 6578]	7484	[5789, 6307]
1704	[2748, 1558]	3631	[5006, 5007]	5558	[6405, 4248]	7485	[7594, 5898]
1705	[2749, 2750]	3632	[5008, 4782]	5559	[4024, 1975]	7486	[2617, 5430]
1706	[2751, 2752]	3633	[4260, 4949]	5560	[673, 2154]	7487	[7595, 5280]
1707	[2753, 2754]	3634	[5009, 5010]	5561	[6579, 2425]	7488	[7596, 7597]
1708	[2755, 2756]	3635	[4966, 3962]	5562	[766, 198]	7489	[30, 3898]
1709	[2757, 2758]	3636	[5011, 4086]	5563	[5202, 200]	7490	[2908, 6146]
1710	[2759, 2760]	3637	[5012, 2090]	5564	[2305, 2426]	7491	[3151, 7383]
1711	[2723, 1075]	3638	[5013, 4154]	5565	[6580, 4112]	7492	[5846, 7598]
1712	[2761, 2762]	3639	[4993, 1711]	5566	[6581, 4815]	7493	[3728, 67]

1713	[2763, 2764]	3640	[1669, 5014]	5567	[6582, 1894]	7494	[7599, 3094]
1714	[2765, 2766]	3641	[2185, 5015]	5568	[2374, 817]	7495	[7600, 3840]
1715	[2767, 2768]	3642	[5016, 2325]	5569	[5092, 6528]	7496	[7076, 6211]
1716	[2769, 2770]	3643	[4607, 1995]	5570	[6583, 6584]	7497	[3761, 3113]
1717	[297, 2771]	3644	[5017, 1728]	5571	[3971, 6585]	7498	[394, 5537]
1718	[1408, 99]	3645	[5018, 5002]	5572	[3954, 6586]	7499	[3467, 7020]
1719	[1260, 2772]	3646	[5019, 5020]	5573	[4117, 4856]	7500	[7601, 7015]
1720	[2773, 2774]	3647	[5021, 5022]	5574	[2041, 1913]	7501	[7023, 5931]
1721	[2775, 2776]	3648	[5023, 4594]	5575	[6582, 2247]	7502	[7602, 1149]
1722	[2777, 2778]	3649	[4819, 5024]	5576	[6587, 6588]	7503	[2800, 3607]
1723	[1397, 1145]	3650	[5025, 5026]	5577	[2502, 4081]	7504	[7603, 1470]
1724	[2779, 2780]	3651	[4301, 4134]	5578	[6589, 4945]	7505	[3342, 7604]
1725	[2781, 2782]	3652	[4884, 4021]	5579	[6590, 6591]	7506	[1516, 5934]
1726	[2783, 2784]	3653	[754, 5027]	5580	[4657, 2554]	7507	[2819, 7368]
1727	[2785, 2786]	3654	[5028, 5029]	5581	[5172, 4515]	7508	[7246, 5629]
1728	[2787, 1374]	3655	[526, 4030]	5582	[5062, 6592]	7509	[27, 1283]
1729	[2788, 2789]	3656	[2373, 816]	5583	[2205, 4742]	7510	[7170, 3348]
1730	[2790, 2791]	3657	[5030, 5031]	5584	[2579, 1657]	7511	[1046, 7605]
1731	[2792, 98]	3658	[5032, 4452]	5585	[6386, 6593]	7512	[5755, 3653]
1732	[2793, 1263]	3659	[4596, 1712]	5586	[4208, 6594]	7513	[2621, 3558]
1733	[2794, 2795]	3660	[2310, 1678]	5587	[6595, 4168]	7514	[7606, 5905]
1734	[2796, 1164]	3661	[4074, 4614]	5588	[699, 4580]	7515	[2737, 5267]
1735	[2797, 2798]	3662	[5033, 732]	5589	[4305, 3979]	7516	[5408, 477]
1736	[322, 2799]	3663	[5034, 5035]	5590	[6596, 4181]	7517	[6058, 3773]
1737	[2800, 2801]	3664	[4291, 5036]	5591	[4991, 1758]	7518	[6011, 3196]
1738	[2802, 951]	3665	[4951, 5037]	5592	[6575, 5069]	7519	[7607, 3849]
1739	[453, 449]	3666	[5038, 5039]	5593	[5243, 6597]	7520	[1530, 3506]
1740	[2803, 2804]	3667	[5040, 5041]	5594	[784, 146]	7521	[984, 7608]
1741	[2805, 2806]	3668	[5042, 4607]	5595	[6498, 6452]	7522	[6087, 1381]
1742	[2807, 2808]	3669	[5043, 5044]	5596	[6598, 6599]	7523	[3293, 2692]
1743	[2809, 2810]	3670	[4363, 5045]	5597	[6600, 4731]	7524	[3439, 2772]
1744	[2811, 2812]	3671	[4254, 5046]	5598	[2421, 1644]	7525	[3241, 3430]
1745	[305, 2813]	3672	[2408, 1801]	5599	[4325, 6601]	7526	[7099, 7609]
1746	[111, 2814]	3673	[4704, 5047]	5600	[6602, 6603]	7527	[7610, 7611]
1747	[2815, 304]	3674	[2469, 52]	5601	[5104, 6507]	7528	[7612, 3038]
1748	[2816, 2817]	3675	[180, 3963]	5602	[4318, 6554]	7529	[5998, 2953]
1749	[2818, 2819]	3676	[5048, 2514]	5603	[808, 6604]	7530	[2816, 5965]
1750	[2820, 2740]	3677	[5049, 1726]	5604	[232, 2261]	7531	[3076, 7613]
1751	[2821, 2822]	3678	[5050, 4039]	5605	[4302, 4507]	7532	[5417, 5600]
1752	[2823, 2824]	3679	[776, 2351]	5606	[6605, 6588]	7533	[5680, 7011]
1753	[2825, 2654]	3680	[5051, 5052]	5607	[4903, 4479]	7534	[3711, 5502]
1754	[394, 2826]	3681	[5053, 5054]	5608	[6606, 2563]	7535	[7287, 7614]
1755	[2827, 2828]	3682	[4152, 1668]	5609	[6607, 5255]	7536	[7615, 7616]
1756	[2829, 1306]	3683	[5055, 2166]	5610	[4735, 4159]	7537	[6348, 2967]

1757	[1142, 114]	3684	[4909, 4136]	5611	[6608, 6609]	7538	[7617, 7053]
1758	[2830, 83]	3685	[5056, 4106]	5612	[1932, 6574]	7539	[2757, 5712]
1759	[2831, 2832]	3686	[4752, 752]	5613	[6610, 6611]	7540	[5458, 7033]
1760	[2833, 2834]	3687	[4689, 4928]	5614	[6612, 5031]	7541	[7618, 5550]
1761	[2835, 2836]	3688	[2599, 2081]	5615	[6613, 6614]	7542	[3349, 5314]
1762	[2837, 2838]	3689	[5048, 5057]	5616	[6615, 5156]	7543	[108, 3871]
1763	[361, 2839]	3690	[5058, 4773]	5617	[6616, 4969]	7544	[7619, 7022]
1764	[2840, 118]	3691	[5059, 5060]	5618	[772, 2296]	7545	[7620, 7621]
1765	[2841, 2842]	3692	[1949, 5061]	5619	[5033, 4697]	7546	[7622, 7623]
1766	[1112, 2843]	3693	[5062, 1977]	5620	[1761, 6617]	7547	[7624, 4128]
1767	[2844, 2845]	3694	[5063, 5064]	5621	[2065, 4665]	7548	[6645, 7625]
1768	[2846, 2847]	3695	[5065, 4328]	5622	[4629, 1956]	7549	[7626, 2255]
1769	[2848, 2849]	3696	[4962, 4300]	5623	[1700, 4531]	7550	[39, 6927]
1770	[2850, 2851]	3697	[2572, 1978]	5624	[6618, 5217]	7551	[5142, 6835]
1771	[2852, 2853]	3698	[601, 5066]	5625	[6611, 1896]	7552	[4166, 6621]
1772	[2854, 2855]	3699	[5067, 233]	5626	[4571, 6619]	7553	[4894, 6849]
1773	[2856, 2857]	3700	[5046, 5068]	5627	[4663, 6620]	7554	[4456, 7399]
1774	[2858, 2859]	3701	[4411, 5069]	5628	[2319, 4987]	7555	[7627, 4477]
1775	[2860, 2861]	3702	[4809, 189]	5629	[2493, 4869]	7556	[7458, 4578]
1776	[2862, 64]	3703	[143, 4577]	5630	[1997, 5134]	7557	[2375, 2182]
1777	[2863, 2864]	3704	[1760, 5027]	5631	[4776, 5204]	7558	[2542, 4912]
1778	[2865, 2866]	3705	[5070, 213]	5632	[6524, 4941]	7559	[6693, 7628]
1779	[2867, 2868]	3706	[5071, 5072]	5633	[4843, 6621]	7560	[2376, 7477]
1780	[359, 1514]	3707	[5073, 5074]	5634	[6622, 2149]	7561	[1653, 1912]
1781	[2869, 2870]	3708	[4222, 1771]	5635	[6623, 6624]	7562	[4017, 7629]
1782	[2871, 2844]	3709	[5075, 1992]	5636	[6625, 6402]	7563	[567, 7630]
1783	[2872, 2861]	3710	[4808, 5076]	5637	[1942, 6626]	7564	[6801, 4267]
1784	[2873, 1364]	3711	[215, 1640]	5638	[541, 2299]	7565	[5141, 198]
1785	[2874, 2875]	3712	[5054, 706]	5639	[6627, 3976]	7566	[134, 4043]
1786	[2876, 2877]	3713	[5077, 2314]	5640	[871, 4502]	7567	[4391, 7631]
1787	[2878, 1573]	3714	[5078, 2452]	5641	[6431, 4470]	7568	[1700, 4937]
1788	[2642, 2879]	3715	[4103, 3953]	5642	[4496, 2013]	7569	[7632, 4444]
1789	[1293, 2880]	3716	[2316, 44]	5643	[2219, 4596]	7570	[7633, 7634]
1790	[2881, 1497]	3717	[5079, 4274]	5644	[5011, 2321]	7571	[4785, 4322]
1791	[2882, 2883]	3718	[4626, 2100]	5645	[6628, 4960]	7572	[791, 7635]
1792	[2884, 2885]	3719	[702, 5080]	5646	[6629, 6630]	7573	[7636, 6404]
1793	[2886, 2887]	3720	[50, 4595]	5647	[2180, 5259]	7574	[5110, 1805]
1794	[2888, 2889]	3721	[235, 2281]	5648	[2537, 2161]	7575	[7637, 1945]
1795	[2890, 2891]	3722	[713, 5081]	5649	[2039, 2476]	7576	[7638, 4482]
1796	[2892, 2893]	3723	[2440, 4063]	5650	[6631, 4607]	7577	[7639, 2147]
1797	[2894, 2895]	3724	[5082, 5083]	5651	[6632, 2606]	7578	[7640, 7440]
1798	[2896, 2897]	3725	[5084, 4501]	5652	[2230, 4700]	7579	[4561, 7641]
1799	[2898, 2899]	3726	[5085, 5086]	5653	[6633, 6634]	7580	[815, 7528]
1800	[1230, 1332]	3727	[4247, 5087]	5654	[4420, 2092]	7581	[4019, 2399]

1801	[938, 2900]	3728	[2397, 4687]	5655	[5219, 4338]	7582	[7642, 4482]
1802	[2901, 2902]	3729	[2152, 1694]	5656	[6635, 6636]	7583	[4892, 6823]
1803	[2903, 2904]	3730	[4996, 5088]	5657	[6637, 6638]	7584	[1787, 7643]
1804	[2905, 2717]	3731	[679, 1766]	5658	[6393, 2545]	7585	[3964, 6495]
1805	[2906, 2907]	3732	[2453, 5089]	5659	[4236, 2581]	7586	[7476, 2377]
1806	[2908, 2909]	3733	[644, 5090]	5660	[6518, 4533]	7587	[3979, 7644]
1807	[2910, 2911]	3734	[4943, 2563]	5661	[6501, 2119]	7588	[2096, 7645]
1808	[2912, 990]	3735	[5091, 1749]	5662	[6639, 6640]	7589	[6475, 2288]
1809	[2913, 2699]	3736	[5092, 1917]	5663	[6641, 835]	7590	[7506, 6738]
1810	[981, 2914]	3737	[5093, 5094]	5664	[2092, 5095]	7591	[7646, 7647]
1811	[2915, 2916]	3738	[2495, 5095]	5665	[5216, 2496]	7592	[2018, 7648]
1812	[2917, 2918]	3739	[2403, 5096]	5666	[6642, 5163]	7593	[7649, 7519]
1813	[1099, 2919]	3740	[5097, 5098]	5667	[5095, 6643]	7594	[1971, 5139]
1814	[2920, 2921]	3741	[5099, 5100]	5668	[6644, 6571]	7595	[6587, 6648]
1815	[1085, 2922]	3742	[5101, 5102]	5669	[767, 4122]	7596	[7650, 6856]
1816	[2923, 2894]	3743	[4686, 4233]	5670	[4797, 6394]	7597	[7651, 6628]
1817	[2924, 2925]	3744	[1747, 4408]	5671	[6645, 6646]	7598	[2445, 7652]
1818	[2926, 1389]	3745	[5103, 5104]	5672	[6647, 4254]	7599	[6569, 614]
1819	[2927, 2928]	3746	[4319, 5105]	5673	[6605, 6648]	7600	[4693, 4362]
1820	[2929, 2930]	3747	[896, 5106]	5674	[2020, 6649]	7601	[7653, 6499]
1821	[2931, 1464]	3748	[5107, 5108]	5675	[6650, 6651]	7602	[4350, 1982]
1822	[2932, 2933]	3749	[1925, 2407]	5676	[5101, 2053]	7603	[5209, 4953]
1823	[2934, 425]	3750	[5109, 4672]	5677	[6652, 4366]	7604	[7654, 5152]
1824	[2935, 2936]	3751	[5070, 4517]	5678	[1804, 5111]	7605	[2462, 7655]
1825	[1309, 2937]	3752	[5110, 5111]	5679	[4584, 4706]	7606	[599, 5131]
1826	[2938, 2939]	3753	[5112, 5113]	5680	[6653, 4185]	7607	[4311, 4565]
1827	[2940, 2941]	3754	[4393, 1983]	5681	[6612, 6654]	7608	[2045, 7656]
1828	[2942, 2943]	3755	[1838, 5114]	5682	[4499, 2062]	7609	[2499, 4686]
1829	[2944, 2945]	3756	[4675, 5115]	5683	[874, 6655]	7610	[5055, 2143]
1830	[2946, 2947]	3757	[2086, 4429]	5684	[6656, 4040]	7611	[6890, 7467]
1831	[1233, 2948]	3758	[4636, 2510]	5685	[5225, 775]	7612	[5010, 7657]
1832	[2949, 2950]	3759	[4475, 5116]	5686	[4468, 2528]	7613	[2261, 7658]
1833	[2951, 308]	3760	[4947, 5117]	5687	[664, 6657]	7614	[843, 829]
1834	[1172, 2952]	3761	[240, 2430]	5688	[675, 6451]	7615	[6938, 614]
1835	[2953, 2954]	3762	[4307, 5118]	5689	[4965, 6658]	7616	[6636, 7659]
1836	[2955, 2956]	3763	[5119, 5120]	5690	[5054, 1608]	7617	[7660, 6530]
1837	[2957, 2958]	3764	[5121, 5122]	5691	[4395, 6659]	7618	[7395, 7625]
1838	[2959, 2960]	3765	[664, 4674]	5692	[4426, 6660]	7619	[4940, 6525]
1839	[309, 2961]	3766	[4466, 5123]	5693	[5157, 6661]	7620	[7661, 6960]
1840	[2962, 1238]	3767	[1636, 49]	5694	[6662, 6663]	7621	[7662, 6675]
1841	[2963, 929]	3768	[5124, 2078]	5695	[128, 6664]	7622	[4668, 7497]
1842	[2930, 2964]	3769	[4047, 2478]	5696	[132, 2076]	7623	[2213, 7663]
1843	[2965, 2966]	3770	[5112, 5125]	5697	[4537, 4592]	7624	[7664, 2747]
1844	[2615, 1215]	3771	[5126, 5127]	5698	[2352, 4640]	7625	[3034, 1383]

1845	[2967, 2968]	3772	[4753, 2014]	5699	[4417, 6665]	7626	[3616, 2932]
1846	[2969, 1396]	3773	[4024, 5128]	5700	[870, 6666]	7627	[3479, 327]
1847	[2970, 2971]	3774	[5129, 2156]	5701	[6667, 2428]	7628	[7665, 6156]
1848	[2972, 2973]	3775	[4541, 2451]	5702	[6668, 4380]	7629	[5469, 7666]
1849	[2974, 371]	3776	[4193, 2315]	5703	[6669, 156]	7630	[1059, 7667]
1850	[2975, 2976]	3777	[5130, 1951]	5704	[1930, 6433]	7631	[1514, 5781]
1851	[2977, 2978]	3778	[4180, 1970]	5705	[6670, 4741]	7632	[2882, 6242]
1852	[2979, 248]	3779	[792, 5131]	5706	[6671, 1964]	7633	[2837, 7207]
1853	[2980, 2981]	3780	[1871, 5132]	5707	[6672, 1797]	7634	[7668, 7669]
1854	[2982, 2749]	3781	[4046, 4958]	5708	[6673, 1791]	7635	[1169, 5553]
1855	[2983, 2984]	3782	[5133, 4798]	5709	[6674, 544]	7636	[3902, 1030]
1856	[2985, 2986]	3783	[5134, 5135]	5710	[6675, 4875]	7637	[7670, 3936]
1857	[2987, 2988]	3784	[5136, 2241]	5711	[6606, 4944]	7638	[7183, 3238]
1858	[2989, 2990]	3785	[5137, 4931]	5712	[4472, 5135]	7639	[5563, 100]
1859	[2991, 1080]	3786	[5138, 5139]	5713	[6676, 816]	7640	[1383, 5327]
1860	[2992, 2993]	3787	[2150, 5140]	5714	[6505, 4450]	7641	[7671, 5917]
1861	[2994, 2995]	3788	[5141, 767]	5715	[5016, 6559]	7642	[6285, 338]
1862	[2996, 2997]	3789	[5142, 4224]	5716	[6677, 6678]	7643	[7019, 2835]
1863	[2998, 1015]	3790	[5143, 2242]	5717	[6679, 4272]	7644	[3615, 5425]
1864	[2999, 3000]	3791	[56, 5144]	5718	[739, 6680]	7645	[3427, 7672]
1865	[3001, 3002]	3792	[5042, 1809]	5719	[1798, 6539]	7646	[7673, 2614]
1866	[3003, 3004]	3793	[1826, 4348]	5720	[4918, 6681]	7647	[5610, 5540]
1867	[3005, 3006]	3794	[2602, 4219]	5721	[4800, 6500]	7648	[1420, 6342]
1868	[3007, 3008]	3795	[5145, 1631]	5722	[4569, 5244]	7649	[5803, 6293]
1869	[3009, 3010]	3796	[5146, 4763]	5723	[6682, 4392]	7650	[3261, 6297]
1870	[459, 3011]	3797	[4313, 5147]	5724	[6683, 5085]	7651	[7674, 3127]
1871	[3012, 106]	3798	[4284, 4104]	5725	[2151, 2104]	7652	[1187, 2707]
1872	[3013, 1175]	3799	[2610, 5148]	5726	[2548, 4861]	7653	[7675, 5761]
1873	[2916, 3014]	3800	[5149, 4363]	5727	[523, 777]	7654	[6055, 1455]
1874	[3015, 3016]	3801	[4608, 2211]	5728	[1889, 1886]	7655	[3155, 6093]
1875	[3017, 1248]	3802	[5058, 2012]	5729	[4432, 575]	7656	[2806, 7163]
1876	[943, 3018]	3803	[5150, 5151]	5730	[4916, 649]	7657	[7029, 3473]
1877	[296, 3019]	3804	[5152, 546]	5731	[6684, 4939]	7658	[7676, 6291]
1878	[3020, 3021]	3805	[5153, 5154]	5732	[4934, 6685]	7659	[6170, 7069]
1879	[3022, 3023]	3806	[4950, 4942]	5733	[6686, 2341]	7660	[7677, 5390]
1880	[3024, 1367]	3807	[5155, 5156]	5734	[2189, 6687]	7661	[5759, 3093]
1881	[3025, 1431]	3808	[5157, 5158]	5735	[6688, 1874]	7662	[5981, 3432]
1882	[3026, 1117]	3809	[2144, 2468]	5736	[4127, 6689]	7663	[3265, 7678]
1883	[1126, 3027]	3810	[5159, 5160]	5737	[5109, 496]	7664	[7679, 1870]
1884	[3028, 299]	3811	[4633, 5161]	5738	[6690, 844]	7665	[6888, 6738]
1885	[414, 3029]	3812	[5162, 5163]	5739	[4414, 6691]	7666	[7680, 7681]
1886	[1088, 413]	3813	[520, 509]	5740	[5073, 6692]	7667	[1856, 7682]
1887	[3030, 3031]	3814	[882, 5164]	5741	[6623, 4890]	7668	[7683, 4911]
1888	[3032, 1072]	3815	[2406, 1926]	5742	[4130, 6693]	7669	[6594, 7684]

1889	[1084, 2968]	3816	[5165, 2492]	5743	[6442, 4603]	7670	[7685, 4631]
1890	[2931, 999]	3817	[4932, 4667]	5744	[6694, 6695]	7671	[4944, 2564]
1891	[3033, 1317]	3818	[5166, 2020]	5745	[4557, 5096]	7672	[4343, 7686]
1892	[3034, 3035]	3819	[2342, 4796]	5746	[6696, 6697]	7673	[6868, 3959]
1893	[1237, 3036]	3820	[4298, 484]	5747	[6698, 6699]	7674	[4895, 5046]
1894	[3037, 3038]	3821	[4977, 688]	5748	[225, 6700]	7675	[2518, 901]
1895	[3039, 3040]	3822	[5167, 5168]	5749	[2111, 713]	7676	[5121, 6814]
1896	[3041, 3042]	3823	[5169, 4203]	5750	[4583, 553]	7677	[7687, 4800]
1897	[3043, 121]	3824	[5170, 2001]	5751	[4544, 6701]	7678	[6823, 7688]
1898	[3044, 3045]	3825	[2047, 4606]	5752	[6702, 5147]	7679	[7689, 3012]
1899	[3046, 3047]	3826	[4729, 2437]	5753	[5093, 6597]	7680	[6319, 5791]
1900	[3048, 2660]	3827	[5124, 538]	5754	[4461, 5037]	7681	[3824, 3805]
1901	[2881, 3049]	3828	[4006, 5171]	5755	[663, 4673]	7682	[2984, 5266]
1902	[3050, 2750]	3829	[1883, 1882]	5756	[484, 6666]	7683	[425, 3901]
1903	[3051, 1207]	3830	[5038, 1869]	5757	[4572, 6554]	7684	[7690, 1338]
1904	[3052, 3053]	3831	[5172, 5173]	5758	[6640, 6703]	7685	[5528, 2702]
1905	[3054, 3055]	3832	[5174, 779]	5759	[6704, 2402]	7686	[5887, 7691]
1906	[3056, 3057]	3833	[5175, 142]	5760	[4189, 6705]	7687	[6029, 3741]
1907	[3058, 3059]	3834	[654, 5176]	5761	[1830, 4357]	7688	[7269, 7692]
1908	[3060, 3061]	3835	[883, 1660]	5762	[4253, 2474]	7689	[7693, 210]
1909	[3062, 3063]	3836	[5177, 5178]	5763	[2162, 6706]	7690	[7694, 7431]
1910	[3064, 1353]	3837	[2075, 5179]	5764	[4215, 6707]	7691	[1648, 7695]
1911	[3065, 3066]	3838	[5180, 4238]	5765	[6708, 877]	7692	[4163, 7696]
1912	[2855, 1145]	3839	[4132, 5181]	5766	[6502, 4358]	7693	[7697, 419]
1913	[916, 107]	3840	[215, 1749]	5767	[6709, 5044]	7694	[100, 5678]
1914	[3067, 3068]	3841	[660, 5182]	5768	[2322, 6693]	7695	[6166, 6071]
1915	[3069, 3070]	3842	[4847, 2042]	5769	[4389, 6710]	7696	[1372, 3508]
1916	[3071, 3072]	3843	[4820, 5183]	5770	[4134, 4507]	7697	[7698, 795]
1917	[3073, 3074]	3844	[5184, 1770]	5771	[6503, 6711]	7698	[7699, 430]
1918	[3061, 3075]	3845	[2536, 1675]	5772	[2374, 4072]	7699	[7700, 2391]
1919	[3076, 3053]	3846	[5185, 1824]	5773	[4509, 4751]	7700	[7701, 3709]
1920	[3077, 3078]	3847	[5186, 5187]	5774	[1998, 6420]	7701	[7702, 4808]
1921	[3079, 1341]	3848	[4958, 4789]	5775	[812, 6712]	7702	[7703, 1258]
1922	[3080, 3081]	3849	[4471, 5134]	5776	[5184, 6713]	7703	[7, 136]
1923	[3082, 3083]	3850	[5188, 5189]	5777	[6548, 4071]		
1924	[3084, 3085]	3851	[4886, 5190]	5778	[6611, 6455]		
1925	[3086, 3087]	3852	[5191, 4465]	5779	[531, 6714]		
1926	[2658, 3088]	3853	[4749, 5192]	5780	[1852, 4982]		

Output function $n \mapsto \tau(n)$:

n	$\tau(n)$	n	$\tau(n)$	n	$\tau(n)$	n	$\tau(n)$	n	$\tau(n)$
0	0	1285	0	2570	0	3855	1	5140	0
1	0	1286	0	2571	1	3856	0	5141	1
2	0	1287	0	2572	0	3857	0	5142	1

3	0	1288	0	2573	1	3858	0	5143	0	6428	1
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5	0	1290	1	2575	0	3860	0	5145	0	6430	0
6	0	1291	1	2576	1	3861	0	5146	0	6431	1
7	0	1292	1	2577	0	3862	1	5147	0	6432	1
8	0	1293	0	2578	0	3863	0	5148	1	6433	0
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14	0	1299	1	2584	0	3869	0	5154	1	6439	0
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17	0	1302	0	2587	0	3872	1	5157	0	6442	1
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35	0	1320	1	2605	1	3890	1	5175	1	6460	0
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181	0	1466	0	2751	1	4036	1	5321	1	6606	1
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250	0	1535	0	2820	1	4105	1	5390	0	6675	1
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253	1	1538	0	2823	1	4108	1	5393	1	6678	0
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262	1	1547	0	2832	1	4117	1	5402	1	6687	1
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265	0	1550	1	2835	0	4120	1	5405	0	6690	0
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273	1	1558	1	2843	1	4128	1	5413	0	6698	0
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275	0	1560	0	2845	1	4130	0	5415	1	6700	0
276	0	1561	0	2846	1	4131	1	5416	1	6701	0
277	1	1562	1	2847	0	4132	1	5417	1	6702	1
278	0	1563	1	2848	1	4133	1	5418	0	6703	1
279	0	1564	1	2849	0	4134	1	5419	1	6704	1
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281	1	1566	0	2851	0	4136	1	5421	0	6706	1
282	1	1567	0	2852	0	4137	0	5422	1	6707	0
283	1	1568	1	2853	0	4138	0	5423	1	6708	0
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285	0	1570	1	2855	1	4140	0	5425	1	6710	1
286	0	1571	0	2856	1	4141	0	5426	1	6711	1
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290	1	1575	1	2860	0	4145	0	5430	1	6715	0
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295	0	1580	1	2865	0	4150	0	5435	1	6720	0
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297	0	1582	0	2867	1	4152	1	5437	0	6722	0
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301	1	1586	0	2871	0	4156	0	5441	1	6726	1
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305	0	1590	1	2875	1	4160	1	5445	0	6730	1
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315	0	1600	1	2885	1	4170	1	5455	1	6740	0
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317	1	1602	1	2887	1	4172	1	5457	0	6742	1
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325	0	1610	0	2895	1	4180	1	5465	1	6750	0
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327	1	1612	1	2897	1	4182	0	5467	1	6752	0
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335	1	1620	0	2905	0	4190	1	5475	1	6760	0
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415	1	1700	1	2985	0	4270	1	5555	0	6840	0
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436	1	1721	0	3006	0	4291	1	5576	0	6861	0
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445	1	1730	0	3015	0	4300	0	5585	0	6870	1
446	1	1731	1	3016	1	4301	1	5586	1	6871	1
447	0	1732	0	3017	0	4302	0	5587	1	6872	0
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450	1	1735	1	3020	1	4305	1	5590	0	6875	0
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456	0	1741	1	3026	1	4311	0	5596	0	6881	1
457	1	1742	0	3027	0	4312	1	5597	1	6882	0
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544	0	1829	1	3114	0	4399	1	5684	0	6969	1
545	1	1830	1	3115	1	4400	1	5685	1	6970	0
546	1	1831	0	3116	1	4401	1	5686	1	6971	0
547	0	1832	1	3117	0	4402	1	5687	1	6972	0
548	0	1833	1	3118	0	4403	1	5688	0	6973	0
549	0	1834	1	3119	0	4404	1	5689	0	6974	0
550	0	1835	1	3120	0	4405	1	5690	0	6975	1
551	0	1836	0	3121	0	4406	0	5691	0	6976	0
552	1	1837	1	3122	1	4407	0	5692	0	6977	1
553	1	1838	1	3123	0	4408	1	5693	0	6978	0
554	1	1839	1	3124	0	4409	0	5694	1	6979	0
555	1	1840	1	3125	1	4410	1	5695	1	6980	1
556	0	1841	1	3126	0	4411	1	5696	1	6981	0
557	1	1842	1	3127	0	4412	0	5697	1	6982	0
558	1	1843	1	3128	1	4413	0	5698	1	6983	1
559	1	1844	0	3129	1	4414	0	5699	1	6984	0
560	0	1845	0	3130	1	4415	0	5700	1	6985	1
561	1	1846	1	3131	0	4416	0	5701	1	6986	0
562	0	1847	0	3132	1	4417	1	5702	1	6987	0
563	0	1848	1	3133	0	4418	1	5703	0	6988	1
564	0	1849	1	3134	1	4419	1	5704	0	6989	0
565	0	1850	0	3135	1	4420	0	5705	1	6990	0
566	0	1851	0	3136	1	4421	1	5706	0	6991	1
567	0	1852	0	3137	1	4422	0	5707	1	6992	0
568	1	1853	1	3138	1	4423	0	5708	0	6993	1
569	1	1854	0	3139	0	4424	0	5709	1	6994	0
570	1	1855	0	3140	1	4425	0	5710	1	6995	1
571	0	1856	0	3141	0	4426	0	5711	1	6996	0
572	0	1857	0	3142	1	4427	0	5712	0	6997	1
573	1	1858	1	3143	1	4428	1	5713	0	6998	0
574	1	1859	0	3144	0	4429	0	5714	0	6999	0

575	1	1860	0	3145	1	4430	0	5715	0	7000	0
576	1	1861	1	3146	1	4431	1	5716	1	7001	0
577	1	1862	1	3147	1	4432	0	5717	1	7002	1
578	1	1863	1	3148	0	4433	1	5718	1	7003	1
579	1	1864	1	3149	1	4434	1	5719	0	7004	0
580	0	1865	0	3150	1	4435	0	5720	0	7005	1
581	0	1866	0	3151	1	4436	1	5721	1	7006	1
582	0	1867	1	3152	1	4437	0	5722	0	7007	1
583	1	1868	1	3153	0	4438	1	5723	0	7008	1
584	1	1869	0	3154	1	4439	1	5724	1	7009	0
585	0	1870	0	3155	1	4440	0	5725	1	7010	0
586	0	1871	1	3156	0	4441	0	5726	1	7011	0
587	0	1872	1	3157	0	4442	1	5727	1	7012	0
588	0	1873	0	3158	0	4443	1	5728	1	7013	1
589	0	1874	0	3159	0	4444	0	5729	0	7014	0
590	1	1875	0	3160	0	4445	0	5730	1	7015	1
591	1	1876	1	3161	0	4446	1	5731	0	7016	0
592	0	1877	1	3162	1	4447	0	5732	1	7017	0
593	1	1878	1	3163	0	4448	0	5733	1	7018	1
594	1	1879	0	3164	1	4449	0	5734	0	7019	0
595	0	1880	1	3165	0	4450	1	5735	1	7020	1
596	1	1881	0	3166	1	4451	1	5736	0	7021	1
597	1	1882	1	3167	0	4452	0	5737	1	7022	1
598	1	1883	1	3168	0	4453	0	5738	0	7023	0
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601	0	1886	0	3171	1	4456	0	5741	1	7026	1
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603	1	1888	0	3173	0	4458	1	5743	1	7028	0
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605	1	1890	0	3175	0	4460	1	5745	1	7030	1
606	1	1891	1	3176	0	4461	1	5746	0	7031	1
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608	0	1893	0	3178	1	4463	0	5748	1	7033	1
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610	0	1895	0	3180	1	4465	1	5750	0	7035	0
611	1	1896	1	3181	0	4466	1	5751	0	7036	0
612	1	1897	1	3182	0	4467	1	5752	1	7037	1
613	0	1898	1	3183	1	4468	1	5753	0	7038	1
614	1	1899	0	3184	0	4469	0	5754	1	7039	0
615	0	1900	1	3185	1	4470	0	5755	0	7040	0
616	0	1901	1	3186	1	4471	0	5756	0	7041	1
617	0	1902	0	3187	1	4472	0	5757	1	7042	1
618	0	1903	1	3188	1	4473	0	5758	1	7043	0

619	0	1904	1	3189	1	4474	0	5759	1	7044	1
620	0	1905	0	3190	1	4475	1	5760	0	7045	0
621	0	1906	1	3191	0	4476	0	5761	1	7046	0
622	0	1907	1	3192	1	4477	1	5762	1	7047	1
623	0	1908	0	3193	0	4478	1	5763	0	7048	1
624	0	1909	1	3194	1	4479	1	5764	0	7049	0
625	0	1910	0	3195	1	4480	1	5765	0	7050	1
626	1	1911	0	3196	0	4481	1	5766	1	7051	1
627	1	1912	1	3197	1	4482	0	5767	0	7052	0
628	0	1913	0	3198	0	4483	1	5768	1	7053	0
629	1	1914	0	3199	1	4484	0	5769	1	7054	0
630	0	1915	1	3200	0	4485	1	5770	1	7055	1
631	0	1916	0	3201	0	4486	1	5771	0	7056	1
632	0	1917	1	3202	0	4487	0	5772	0	7057	1
633	1	1918	1	3203	0	4488	1	5773	0	7058	0
634	0	1919	0	3204	1	4489	0	5774	1	7059	0
635	0	1920	0	3205	1	4490	0	5775	0	7060	1
636	0	1921	1	3206	1	4491	0	5776	0	7061	1
637	1	1922	1	3207	0	4492	0	5777	0	7062	1
638	1	1923	0	3208	0	4493	0	5778	1	7063	1
639	1	1924	0	3209	1	4494	0	5779	0	7064	1
640	1	1925	1	3210	0	4495	1	5780	0	7065	1
641	1	1926	0	3211	0	4496	0	5781	1	7066	1
642	1	1927	0	3212	0	4497	0	5782	0	7067	1
643	0	1928	0	3213	0	4498	1	5783	1	7068	1
644	1	1929	0	3214	0	4499	1	5784	0	7069	0
645	0	1930	0	3215	1	4500	0	5785	1	7070	0
646	1	1931	1	3216	1	4501	1	5786	0	7071	0
647	1	1932	1	3217	1	4502	1	5787	1	7072	1
648	0	1933	1	3218	0	4503	0	5788	0	7073	1
649	0	1934	0	3219	1	4504	0	5789	0	7074	0
650	0	1935	0	3220	0	4505	1	5790	0	7075	1
651	1	1936	0	3221	1	4506	1	5791	0	7076	0
652	1	1937	0	3222	0	4507	0	5792	0	7077	1
653	1	1938	1	3223	1	4508	1	5793	1	7078	1
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655	0	1940	1	3225	1	4510	0	5795	0	7080	1
656	0	1941	0	3226	0	4511	1	5796	0	7081	1
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659	0	1944	1	3229	0	4514	0	5799	1	7084	0
660	0	1945	0	3230	0	4515	1	5800	1	7085	0
661	1	1946	1	3231	0	4516	1	5801	1	7086	1
662	0	1947	0	3232	0	4517	1	5802	1	7087	0

663	0	1948	0	3233	1	4518	0	5803	1	7088	1
664	1	1949	0	3234	0	4519	0	5804	0	7089	1
665	1	1950	1	3235	1	4520	1	5805	1	7090	1
666	1	1951	1	3236	0	4521	1	5806	1	7091	0
667	0	1952	0	3237	1	4522	0	5807	0	7092	0
668	0	1953	0	3238	1	4523	1	5808	1	7093	0
669	1	1954	0	3239	1	4524	0	5809	1	7094	1
670	0	1955	1	3240	0	4525	1	5810	1	7095	1
671	0	1956	1	3241	0	4526	1	5811	1	7096	0
672	0	1957	1	3242	0	4527	0	5812	1	7097	0
673	1	1958	1	3243	1	4528	0	5813	1	7098	1
674	0	1959	1	3244	1	4529	1	5814	1	7099	0
675	0	1960	1	3245	1	4530	0	5815	1	7100	0
676	1	1961	1	3246	0	4531	1	5816	1	7101	0
677	1	1962	0	3247	1	4532	1	5817	0	7102	0
678	0	1963	1	3248	0	4533	1	5818	1	7103	0
679	1	1964	1	3249	1	4534	0	5819	0	7104	0
680	1	1965	0	3250	0	4535	0	5820	0	7105	1
681	0	1966	1	3251	0	4536	0	5821	1	7106	0
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683	0	1968	0	3253	1	4538	0	5823	1	7108	0
684	1	1969	1	3254	0	4539	0	5824	0	7109	0
685	0	1970	1	3255	1	4540	0	5825	1	7110	1
686	1	1971	1	3256	0	4541	0	5826	0	7111	1
687	0	1972	0	3257	1	4542	1	5827	1	7112	0
688	0	1973	0	3258	1	4543	1	5828	0	7113	1
689	0	1974	0	3259	0	4544	0	5829	0	7114	0
690	1	1975	0	3260	0	4545	1	5830	0	7115	1
691	1	1976	0	3261	0	4546	0	5831	0	7116	1
692	1	1977	1	3262	1	4547	1	5832	0	7117	0
693	0	1978	0	3263	0	4548	1	5833	0	7118	1
694	0	1979	0	3264	1	4549	1	5834	1	7119	1
695	0	1980	0	3265	1	4550	0	5835	1	7120	1
696	0	1981	0	3266	1	4551	0	5836	0	7121	1
697	1	1982	1	3267	0	4552	1	5837	0	7122	1
698	0	1983	0	3268	0	4553	0	5838	1	7123	0
699	0	1984	0	3269	1	4554	0	5839	1	7124	0
700	0	1985	0	3270	0	4555	0	5840	1	7125	0
701	0	1986	1	3271	1	4556	1	5841	0	7126	0
702	0	1987	1	3272	1	4557	1	5842	0	7127	1
703	1	1988	0	3273	1	4558	1	5843	1	7128	1
704	0	1989	1	3274	0	4559	1	5844	0	7129	1
705	1	1990	1	3275	1	4560	1	5845	1	7130	1
706	0	1991	0	3276	0	4561	1	5846	1	7131	0

707	1	1992	1	3277	0	4562	0	5847	0	7132	1
708	0	1993	1	3278	0	4563	1	5848	0	7133	1
709	1	1994	1	3279	1	4564	0	5849	0	7134	1
710	0	1995	0	3280	0	4565	0	5850	1	7135	1
711	0	1996	1	3281	1	4566	0	5851	0	7136	1
712	0	1997	1	3282	0	4567	1	5852	0	7137	0
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714	1	1999	0	3284	1	4569	0	5854	0	7139	1
715	0	2000	0	3285	0	4570	1	5855	1	7140	0
716	0	2001	0	3286	0	4571	1	5856	0	7141	0
717	1	2002	0	3287	1	4572	1	5857	1	7142	1
718	0	2003	1	3288	1	4573	0	5858	1	7143	0
719	0	2004	1	3289	1	4574	1	5859	1	7144	1
720	1	2005	0	3290	0	4575	1	5860	1	7145	1
721	1	2006	0	3291	1	4576	0	5861	0	7146	1
722	0	2007	0	3292	0	4577	1	5862	1	7147	0
723	1	2008	0	3293	1	4578	0	5863	0	7148	0
724	1	2009	0	3294	1	4579	1	5864	0	7149	1
725	1	2010	0	3295	1	4580	1	5865	1	7150	1
726	1	2011	1	3296	1	4581	0	5866	1	7151	0
727	1	2012	1	3297	0	4582	0	5867	1	7152	0
728	0	2013	0	3298	0	4583	0	5868	0	7153	0
729	1	2014	0	3299	0	4584	0	5869	1	7154	0
730	0	2015	1	3300	1	4585	1	5870	1	7155	0
731	1	2016	1	3301	1	4586	1	5871	0	7156	1
732	1	2017	1	3302	1	4587	1	5872	1	7157	1
733	1	2018	1	3303	0	4588	1	5873	1	7158	0
734	1	2019	1	3304	0	4589	0	5874	0	7159	1
735	0	2020	0	3305	0	4590	1	5875	1	7160	1
736	0	2021	0	3306	0	4591	0	5876	0	7161	1
737	0	2022	0	3307	1	4592	0	5877	0	7162	1
738	1	2023	0	3308	0	4593	0	5878	0	7163	0
739	1	2024	1	3309	1	4594	1	5879	0	7164	1
740	1	2025	1	3310	0	4595	0	5880	1	7165	1
741	1	2026	1	3311	0	4596	1	5881	0	7166	1
742	1	2027	1	3312	0	4597	1	5882	0	7167	1
743	0	2028	0	3313	0	4598	0	5883	0	7168	0
744	1	2029	0	3314	1	4599	1	5884	0	7169	1
745	0	2030	1	3315	0	4600	0	5885	1	7170	0
746	0	2031	1	3316	1	4601	1	5886	0	7171	1
747	0	2032	0	3317	0	4602	1	5887	1	7172	1
748	1	2033	0	3318	0	4603	1	5888	1	7173	1
749	0	2034	0	3319	1	4604	0	5889	1	7174	1
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752	1	2037	1	3322	0	4607	0	5892	0	7177	0
753	1	2038	0	3323	1	4608	1	5893	1	7178	0
754	1	2039	1	3324	0	4609	1	5894	1	7179	1
755	0	2040	0	3325	1	4610	1	5895	0	7180	0
756	1	2041	0	3326	0	4611	1	5896	0	7181	1
757	1	2042	1	3327	1	4612	1	5897	1	7182	1
758	1	2043	0	3328	0	4613	0	5898	1	7183	0
759	1	2044	1	3329	0	4614	1	5899	1	7184	1
760	1	2045	0	3330	1	4615	0	5900	0	7185	1
761	1	2046	0	3331	0	4616	0	5901	0	7186	0
762	1	2047	0	3332	1	4617	1	5902	1	7187	0
763	1	2048	0	3333	0	4618	1	5903	0	7188	1
764	1	2049	1	3334	0	4619	0	5904	1	7189	1
765	0	2050	1	3335	0	4620	0	5905	1	7190	0
766	0	2051	0	3336	0	4621	0	5906	0	7191	0
767	0	2052	1	3337	0	4622	1	5907	0	7192	0
768	0	2053	0	3338	1	4623	0	5908	0	7193	0
769	1	2054	1	3339	1	4624	0	5909	0	7194	1
770	0	2055	0	3340	1	4625	0	5910	0	7195	0
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773	1	2058	0	3343	1	4628	0	5913	1	7198	0
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775	1	2060	1	3345	0	4630	1	5915	0	7200	0
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777	0	2062	0	3347	0	4632	1	5917	1	7202	0
778	1	2063	1	3348	1	4633	0	5918	1	7203	1
779	0	2064	1	3349	0	4634	1	5919	0	7204	1
780	1	2065	1	3350	0	4635	1	5920	1	7205	1
781	1	2066	1	3351	1	4636	1	5921	0	7206	0
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783	0	2068	0	3353	1	4638	0	5923	1	7208	1
784	1	2069	0	3354	1	4639	0	5924	0	7209	1
785	0	2070	1	3355	1	4640	1	5925	0	7210	1
786	1	2071	0	3356	1	4641	1	5926	1	7211	0
787	1	2072	0	3357	1	4642	0	5927	0	7212	0
788	0	2073	0	3358	1	4643	0	5928	1	7213	0
789	1	2074	0	3359	0	4644	1	5929	0	7214	1
790	1	2075	1	3360	1	4645	0	5930	1	7215	1
791	1	2076	0	3361	0	4646	1	5931	1	7216	0
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793	1	2078	0	3363	1	4648	1	5933	1	7218	0
794	1	2079	1	3364	1	4649	1	5934	0	7219	1

795	1	2080	0	3365	0	4650	0	5935	0	7220	1
796	0	2081	0	3366	0	4651	1	5936	1	7221	0
797	1	2082	1	3367	1	4652	0	5937	0	7222	0
798	1	2083	1	3368	1	4653	1	5938	1	7223	0
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800	1	2085	0	3370	0	4655	1	5940	1	7225	1
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802	0	2087	1	3372	1	4657	0	5942	1	7227	1
803	1	2088	0	3373	0	4658	1	5943	1	7228	0
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805	0	2090	1	3375	0	4660	1	5945	0	7230	0
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808	1	2093	0	3378	1	4663	1	5948	1	7233	1
809	1	2094	0	3379	1	4664	0	5949	1	7234	0
810	1	2095	1	3380	1	4665	0	5950	0	7235	1
811	0	2096	1	3381	0	4666	0	5951	1	7236	1
812	0	2097	1	3382	0	4667	1	5952	0	7237	0
813	0	2098	1	3383	1	4668	0	5953	1	7238	0
814	0	2099	1	3384	0	4669	1	5954	1	7239	0
815	1	2100	0	3385	1	4670	1	5955	1	7240	1
816	1	2101	1	3386	1	4671	0	5956	1	7241	0
817	1	2102	0	3387	1	4672	1	5957	0	7242	1
818	0	2103	0	3388	0	4673	0	5958	1	7243	1
819	0	2104	1	3389	1	4674	1	5959	0	7244	0
820	1	2105	0	3390	0	4675	0	5960	0	7245	1
821	0	2106	1	3391	1	4676	0	5961	0	7246	0
822	1	2107	1	3392	0	4677	0	5962	1	7247	0
823	0	2108	1	3393	1	4678	1	5963	1	7248	1
824	1	2109	1	3394	1	4679	1	5964	1	7249	0
825	1	2110	1	3395	1	4680	0	5965	0	7250	0
826	1	2111	0	3396	0	4681	0	5966	1	7251	1
827	1	2112	1	3397	1	4682	1	5967	1	7252	0
828	1	2113	0	3398	0	4683	0	5968	1	7253	0
829	1	2114	1	3399	0	4684	0	5969	0	7254	1
830	0	2115	1	3400	1	4685	1	5970	1	7255	0
831	0	2116	1	3401	0	4686	1	5971	1	7256	1
832	0	2117	1	3402	0	4687	1	5972	1	7257	1
833	1	2118	0	3403	0	4688	0	5973	0	7258	0
834	0	2119	1	3404	0	4689	0	5974	1	7259	0
835	1	2120	0	3405	0	4690	1	5975	0	7260	0
836	1	2121	1	3406	0	4691	0	5976	1	7261	1
837	1	2122	0	3407	1	4692	0	5977	0	7262	0
838	1	2123	0	3408	1	4693	0	5978	1	7263	0

839	0	2124	0	3409	0	4694	1	5979	1	7264	0
840	0	2125	0	3410	0	4695	0	5980	1	7265	0
841	1	2126	1	3411	0	4696	1	5981	0	7266	0
842	0	2127	1	3412	1	4697	0	5982	0	7267	0
843	1	2128	0	3413	1	4698	1	5983	0	7268	1
844	0	2129	0	3414	0	4699	1	5984	1	7269	0
845	1	2130	1	3415	0	4700	0	5985	0	7270	1
846	0	2131	1	3416	1	4701	0	5986	1	7271	1
847	0	2132	0	3417	0	4702	1	5987	1	7272	0
848	0	2133	1	3418	1	4703	1	5988	0	7273	1
849	0	2134	0	3419	0	4704	1	5989	0	7274	1
850	0	2135	0	3420	1	4705	1	5990	1	7275	0
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852	0	2137	0	3422	0	4707	0	5992	0	7277	1
853	0	2138	0	3423	1	4708	0	5993	0	7278	0
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855	0	2140	1	3425	0	4710	0	5995	0	7280	1
856	0	2141	0	3426	0	4711	0	5996	1	7281	0
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858	1	2143	1	3428	0	4713	0	5998	0	7283	1
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860	1	2145	1	3430	1	4715	0	6000	1	7285	0
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863	1	2148	0	3433	1	4718	0	6003	1	7288	1
864	0	2149	0	3434	0	4719	1	6004	0	7289	1
865	1	2150	1	3435	1	4720	0	6005	0	7290	0
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867	1	2152	0	3437	1	4722	1	6007	1	7292	0
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870	1	2155	0	3440	0	4725	0	6010	0	7295	0
871	1	2156	1	3441	1	4726	0	6011	0	7296	1
872	0	2157	1	3442	0	4727	1	6012	1	7297	1
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874	0	2159	1	3444	1	4729	1	6014	0	7299	0
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876	1	2161	1	3446	1	4731	0	6016	0	7301	1
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878	1	2163	0	3448	1	4733	0	6018	0	7303	0
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880	0	2165	0	3450	0	4735	1	6020	1	7305	1
881	0	2166	0	3451	1	4736	1	6021	1	7306	1
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884	0	2169	1	3454	0	4739	1	6024	0	7309	0
885	0	2170	1	3455	1	4740	0	6025	1	7310	0
886	0	2171	1	3456	0	4741	0	6026	0	7311	0
887	1	2172	1	3457	1	4742	0	6027	0	7312	1
888	0	2173	1	3458	0	4743	1	6028	1	7313	1
889	0	2174	1	3459	1	4744	0	6029	1	7314	1
890	0	2175	0	3460	0	4745	1	6030	1	7315	0
891	0	2176	0	3461	0	4746	1	6031	1	7316	0
892	0	2177	1	3462	1	4747	0	6032	0	7317	0
893	1	2178	0	3463	1	4748	1	6033	1	7318	0
894	1	2179	1	3464	0	4749	0	6034	0	7319	0
895	0	2180	0	3465	1	4750	0	6035	0	7320	0
896	0	2181	1	3466	0	4751	1	6036	0	7321	1
897	0	2182	0	3467	1	4752	0	6037	0	7322	1
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900	1	2185	0	3470	0	4755	1	6040	1	7325	0
901	1	2186	1	3471	1	4756	1	6041	1	7326	0
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903	0	2188	0	3473	0	4758	0	6043	1	7328	1
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906	0	2191	0	3476	1	4761	0	6046	1	7331	0
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908	0	2193	0	3478	1	4763	0	6048	1	7333	0
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910	1	2195	0	3480	0	4765	1	6050	1	7335	1
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912	0	2197	0	3482	1	4767	1	6052	0	7337	1
913	1	2198	1	3483	1	4768	0	6053	1	7338	1
914	0	2199	1	3484	0	4769	0	6054	1	7339	1
915	0	2200	0	3485	0	4770	1	6055	0	7340	0
916	0	2201	0	3486	0	4771	0	6056	0	7341	0
917	0	2202	1	3487	1	4772	0	6057	0	7342	1
918	1	2203	1	3488	0	4773	0	6058	0	7343	0
919	1	2204	0	3489	1	4774	0	6059	1	7344	1
920	0	2205	0	3490	1	4775	0	6060	0	7345	1
921	0	2206	0	3491	1	4776	1	6061	1	7346	1
922	0	2207	1	3492	1	4777	1	6062	0	7347	1
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924	0	2209	0	3494	1	4779	0	6064	1	7349	1
925	0	2210	1	3495	1	4780	0	6065	1	7350	0
926	0	2211	1	3496	0	4781	0	6066	1	7351	0

927	0	2212	1	3497	1	4782	1	6067	1	7352	1
928	0	2213	1	3498	0	4783	0	6068	1	7353	0
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930	1	2215	0	3500	1	4785	1	6070	1	7355	0
931	1	2216	1	3501	0	4786	0	6071	1	7356	0
932	1	2217	1	3502	1	4787	1	6072	0	7357	1
933	1	2218	1	3503	1	4788	0	6073	1	7358	1
934	1	2219	0	3504	0	4789	0	6074	0	7359	0
935	1	2220	1	3505	0	4790	1	6075	1	7360	1
936	1	2221	1	3506	1	4791	1	6076	0	7361	1
937	1	2222	1	3507	1	4792	1	6077	0	7362	1
938	1	2223	0	3508	1	4793	0	6078	0	7363	0
939	0	2224	1	3509	1	4794	1	6079	0	7364	0
940	1	2225	1	3510	0	4795	0	6080	0	7365	0
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943	1	2228	0	3513	1	4798	1	6083	0	7368	1
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945	0	2230	0	3515	0	4800	1	6085	0	7370	0
946	1	2231	1	3516	0	4801	0	6086	1	7371	0
947	0	2232	1	3517	1	4802	0	6087	1	7372	1
948	0	2233	0	3518	0	4803	1	6088	1	7373	1
949	0	2234	0	3519	1	4804	0	6089	0	7374	1
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956	1	2241	1	3526	0	4811	1	6096	0	7381	1
957	1	2242	1	3527	1	4812	0	6097	0	7382	0
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961	0	2246	0	3531	1	4816	0	6101	0	7386	0
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965	0	2250	0	3535	1	4820	0	6105	1	7390	0
966	1	2251	1	3536	1	4821	0	6106	1	7391	0
967	1	2252	0	3537	1	4822	0	6107	0	7392	0
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971	0	2256	1	3541	0	4826	0	6111	0	7396	1
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975	0	2260	0	3545	1	4830	0	6115	1	7400	1
976	0	2261	0	3546	0	4831	0	6116	0	7401	0
977	1	2262	1	3547	0	4832	1	6117	0	7402	1
978	1	2263	0	3548	0	4833	0	6118	0	7403	1
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981	1	2266	0	3551	1	4836	1	6121	0	7406	1
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986	0	2271	0	3556	1	4841	1	6126	1	7411	1
987	0	2272	0	3557	1	4842	1	6127	1	7412	1
988	0	2273	1	3558	1	4843	0	6128	0	7413	0
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995	1	2280	0	3565	1	4850	0	6135	0	7420	0
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1002	0	2287	0	3572	1	4857	0	6142	1	7427	1
1003	0	2288	1	3573	0	4858	0	6143	0	7428	1
1004	0	2289	1	3574	1	4859	1	6144	0	7429	1
1005	1	2290	0	3575	0	4860	0	6145	0	7430	0
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1007	1	2292	0	3577	0	4862	1	6147	0	7432	1
1008	1	2293	0	3578	0	4863	0	6148	1	7433	0
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1012	1	2297	0	3582	1	4867	1	6152	1	7437	0
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1019	1	2304	0	3589	1	4874	0	6159	1	7444	0
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1021	0	2306	0	3591	0	4876	0	6161	0	7446	1
1022	0	2307	1	3592	0	4877	0	6162	1	7447	0
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1076	1	2361	1	3646	1	4931	0	6216	1	7501	0
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