

Chronal Calendar Design

Matthew Hinton, ©1435̄ (2024)

1435̄.Ā (January 2024)

1 Introduction

A signed base two dozen calendar with elements from the Dozenal Solstice Calendar and the traditional Chinese calendar.

Advantages:

1. Every solstice, equinox, and solar term accurate to the day (UTC)
2. Single digit days and solar terms
3. Efficient partitions of years into terms and pentads
4. Inclusion of zeroth day of terms and pentads is coherent with balanced base intuition

Concessions:

1. Solar term adjustment pattern is hard to memorise for each year
2. Thus making day-difference calculations harder to intuit and predict
3. Does not give each day a unique name; some days are split between years or pentads
4. Perhaps conceptually more difficult to keep track of solar terms instead of months

TODO:

1. Settle on names for days of the pentad
2. Name the solar terms
3. Decide if it's worth the trouble!

2 Layout

$\bar{7}$	$\bar{6}$	$\bar{5}$	$\bar{4}$	$\bar{3}$
$\bar{2}$	$\bar{1}$	$\bar{0}$		

3 Example year: 1435̄ (2024)

1435̄	Pentad 1̄					Pentad 0					Pentad 1					S-day
\bar{C}								$\bar{C}0$	$\bar{C}1$	$\bar{C}2$	$\bar{C}3$	$\bar{C}4$	$\bar{C}5$	$\bar{C}6$	$\bar{C}7$	
\bar{B}	$\bar{7}$	$\bar{B}6$	$\bar{B}5$	$\bar{B}4$	$\bar{B}3$	$\bar{B}2$	$\bar{B}1$	$\bar{B}0$	$\bar{B}1$	$\bar{B}2$	$\bar{B}3$	$\bar{B}4$	$\bar{B}5$	$\bar{B}6$	$\bar{B}7$	
\bar{A}	$\bar{A}7$	$\bar{A}6$	$\bar{A}5$	$\bar{A}4$	$\bar{A}3$	$\bar{A}2$	$\bar{A}1$	$\bar{A}0$	$\bar{A}1$	$\bar{A}2$	$\bar{A}3$	$\bar{A}4$	$\bar{A}5$	$\bar{A}6$	$\bar{A}7$	
$\bar{9}$	$\bar{9}7$	$\bar{9}6$	$\bar{9}5$	$\bar{9}4$	$\bar{9}3$	$\bar{9}2$	$\bar{9}1$	$\bar{9}0$	$\bar{9}1$	$\bar{9}2$	$\bar{9}3$	$\bar{9}4$	$\bar{9}5$	$\bar{9}6$	$\bar{9}7$	
$\bar{8}$	$\bar{8}7$	$\bar{8}6$	$\bar{8}5$	$\bar{8}4$	$\bar{8}3$	$\bar{8}2$	$\bar{8}1$	$\bar{8}0$	$\bar{8}1$	$\bar{8}2$	$\bar{8}3$	$\bar{8}4$	$\bar{8}5$	$\bar{8}6$	$\bar{8}7$	
$\bar{7}$	$\bar{7}7$	$\bar{7}6$	$\bar{7}5$	$\bar{7}4$	$\bar{7}3$	$\bar{7}2$	$\bar{7}1$	$\bar{7}0$	$\bar{7}1$	$\bar{7}2$	$\bar{7}3$	$\bar{7}4$	$\bar{7}5$	$\bar{7}6$	$\bar{7}7$	
$\bar{6}$	$\bar{6}7$	$\bar{6}6$	$\bar{6}5$	$\bar{6}4$	$\bar{6}3$	$\bar{6}2$	$\bar{6}1$	$\bar{6}0$	$\bar{6}1$	$\bar{6}2$	$\bar{6}3$	$\bar{6}4$	$\bar{6}5$	$\bar{6}6$	$\bar{6}7$	
$\bar{5}$	$\bar{5}7$	$\bar{5}6$	$\bar{5}5$	$\bar{5}4$	$\bar{5}3$	$\bar{5}2$	$\bar{5}1$	$\bar{5}0$	$\bar{5}1$	$\bar{5}2$	$\bar{5}3$	$\bar{5}4$	$\bar{5}5$	$\bar{5}6$	$\bar{5}7$	
$\bar{4}$	$\bar{4}7$	$\bar{4}6$	$\bar{4}5$	$\bar{4}4$	$\bar{4}3$	$\bar{4}2$	$\bar{4}1$	$\bar{4}0$	$\bar{4}1$	$\bar{4}2$	$\bar{4}3$	$\bar{4}4$	$\bar{4}5$	$\bar{4}6$	$\bar{4}7$	48-38̄
$\bar{3}$	$\bar{3}7$	$\bar{3}6$	$\bar{3}5$	$\bar{3}4$	$\bar{3}3$	$\bar{3}2$	$\bar{3}1$	$\bar{3}0$	$\bar{3}1$	$\bar{3}2$	$\bar{3}3$	$\bar{3}4$	$\bar{3}5$	$\bar{3}6$	$\bar{3}7$	
$\bar{2}$	$\bar{2}7$	$\bar{2}6$	$\bar{2}5$	$\bar{2}4$	$\bar{2}3$	$\bar{2}2$	$\bar{2}1$	$\bar{2}0$	$\bar{2}1$	$\bar{2}2$	$\bar{2}3$	$\bar{2}4$	$\bar{2}5$	$\bar{2}6$	$\bar{2}7$	28-18̄
$\bar{1}$	$\bar{1}7$	$\bar{1}6$	$\bar{1}5$	$\bar{1}4$	$\bar{1}3$	$\bar{1}2$	$\bar{1}1$	$\bar{1}0$	$\bar{1}1$	$\bar{1}2$	$\bar{1}3$	$\bar{1}4$	$\bar{1}5$	$\bar{1}6$	$\bar{1}7$	
0	07̄	06̄	05̄	04̄	03̄	02̄	01̄	00	01	02	03	04	05	06	07	08-18̄
1	17̄	16̄	15̄	14̄	13̄	12̄	11̄	10	11	12	13	14	15	16	17	18-28̄
2	27̄	26̄	25̄	24̄	23̄	22̄	21̄	20	21	22	23	24	25	26	27	28-38̄
3	37̄	36̄	35̄	34̄	33̄	32̄	31̄	30	31	32	33	34	35	36	37	
4	47̄	46̄	45̄	44̄	43̄	42̄	41̄	40	41	42	43	44	45	46	47	48-58̄
5	57̄	56̄	55̄	54̄	53̄	52̄	51̄	50	51	52	53	54	55	56	57	
6	67̄	66̄	65̄	64̄	63̄	62̄	61̄	60	61	62	63	64	65	66	67	
7	77̄	76̄	75̄	74̄	73̄	72̄	71̄	70	71	72	73	74	75	76	77	
8	87̄	86̄	85̄	84̄	83̄	82̄	81̄	80	81	82	83	84	85	86	87	
9	97̄	96̄	95̄	94̄	93̄	92̄	91̄	90	91	92	93	94	95	96	97	
A	A7̄	A6̄	A5̄	A4̄	A3̄	A2̄	A1̄	A0	A1	A2	A3	A4	A5	A6	A7	
B	B7̄	B6̄	B5̄	B4̄	B3̄	B2̄	B1̄	B0	B1	B2	B3	B4	B5	B6	B7	
C	C7̄	C6̄	C5̄	C4̄	C3̄	C2̄	C1̄	C0								

4 0-dates (2024)

Dec 22 (2023)	Jan 05	Jan 20	Feb 04
Feb 19	Mar 05	Mar 20	Apr 04
Apr 19	May 05	May 20	Jun 05
Jun 20	Jul 06	Jul 22	Aug 07
Aug 22	Sep 07	Sep 22	Oct 07
Oct 22	Nov 06	Nov 21	Dec 06

5 S-day pattern (2024)

-1	0	0	0
0	0	0	0
1	0	1	0
1	1	1	0
1	0	0	0
0	0	0	0

6 2023-(1435̄)-2038 patterns

$\begin{bmatrix} 0 & 0 & 0 & -1 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 1 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 \end{bmatrix}$
2023 (1400)	2024 (1400)	2025 (1400)	2026 (1400)
$\begin{bmatrix} 0 & 0 & 0 & -1 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 1 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 1 \\ 1 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & -1 \end{bmatrix}$
2027 (1400)	2028 (1400)	2029 (1400)	2030 (1400)
$\begin{bmatrix} 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 1 \\ 1 & 1 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 1 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 1 \\ 1 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & -1 \end{bmatrix}$
2031 (1400)	2032 (1400)	2033 (1400)	2034 (1400)
$\begin{bmatrix} 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 1 \\ 1 & 0 & 1 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 1 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & -1 & 0 & 0 \end{bmatrix}$	$\begin{bmatrix} 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 0 & -1 \end{bmatrix}$
2035 (1400)	2036 (1400)	2037 (1400)	2038 (1400)

7 1957-2553 patterns

year		pattern																							
greg[d]	chron[c]	\bar{C}	\bar{B}	\bar{A}	9	8	7	6	5	4	3	2	1	0	1	2	3	4	5	6	7	8	9	A	B
1957	1400	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1958	1401	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1959	1402	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1960	1403	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1961	1404	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1962	1405	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1963	1406	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1964	1407	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1965	1408	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1966	1409	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1967	140A	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0
1968	140B	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	0	0	-1
1969	141 \bar{C}	0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1970	14 \bar{B}	-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1971	141 \bar{A}	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
1972	1419	0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
1973	1418	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
1974	1417	-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1975	1416	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
1976	1415	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	-1	0
1977	1414	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1978	1413	0	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1979	1412	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
1980	1411	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1981	1410	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1982	1411	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
1983	1412	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1984	1413	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1985	1414	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1986	1415	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1987	1416	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1988	1417	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1989	1418	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1990	1419	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1991	141A	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1992	141B	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1993	142 \bar{C}	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1994	142 \bar{B}	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1995	142 \bar{A}	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1996	1429	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1997	1428	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	0	0	-1
1998	1427	0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1999	1426	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2000	1425	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0
2001	1424	0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
2002	1423	0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2003	1422	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2004	1421	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
2005	1420	0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
2006	1421	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2007	1422	-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0

2008	1423	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2009	1424	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2010	1425	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2011	1426	0	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
2012	1427	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2013	1428	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2014	1429	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2015	142A	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2016	142B	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2017	143C̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2018	143B̄	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2019	143Ā	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2020	1439	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2021	1438̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2022	1437̄	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2023	1436̄	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2024	1435	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2025	1434	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2026	1433	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2027	1432̄	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2028	1431̄	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2029	1430	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0
2030	1431	0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
2031	1432	0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2032	1433	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2033	1434	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0
2034	1435	0	0	-1	0	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	-1
2035	1436	0	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2036	1437	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2037	1438̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
2038	1439̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	0	-1
2039	143A	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2040	143B	-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2041	144C̄	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2042	144B̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2043	144Ā	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2044	1449̄	-1	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
2045	1448̄	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2046	1447̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2047	1446	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2048	1445̄	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2049	1444̄	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2050	1443̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2051	1442̄	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2052	1441̄	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2053	1440̄	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2054	1441	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2055	1442	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	0	0	0	-1
2056	1443	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	1	0	1	0	0	0	0	0
2057	1444	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2058	1445̄	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2059	1446̄	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2060	1447̄	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2061	1448̄	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2062	1449	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0

2063	144A	0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	-1	
2064	144B	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	
2065	145C	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0		
2066	145B	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	
2067	145A	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	-1	
2068	1459	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	
2069	1458	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	
2070	1457	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2071	1456	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	
2072	1455	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	
2073	1454	-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	
2074	1453	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2075	1452	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2076	1451	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2077	1450	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2078	1451	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2079	1452	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2080	1453	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2081	1454	0	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2082	1455	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2083	1456	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2084	1457	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2085	1458	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2086	1459	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2087	145A	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2088	145B	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2089	146C	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2090	146B	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2091	146A	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2092	1469	0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
2093	1468	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2094	1467	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0	0
2095	1466	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1	0
2096	1465	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	-1
2097	1464	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2098	1463	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2099	1462	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0
2100	1461	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2101	1460	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2102	1461	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
2103	1462	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2104	1463	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2105	1464	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2106	1465	-1	0	0	0	-1	1	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2107	1466	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2108	1467	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2109	1468	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2110	1469	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2111	146A	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2112	146B	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2113	147C	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2114	147B	0	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2115	147A	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	1	-1	0	0
2116	1479	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2117	1478	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1

2118	1477	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	0	0	0	0	0
2119	1476	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2120	1475	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2121	1474	0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	-1
2122	1473	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2123	1472	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2124	1471	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2125	1470	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	-1
2126	1471	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2127	1472	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2128	1473	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
2129	1474	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	-1
2130	1475	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2131	1476	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2132	1477	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2133	1478	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2134	1479	0	0	0	-1	0	0	0	1	0	0	1	0	1	1	0	1	1	0	0	0	0	0
2135	147A	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2136	147B	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2137	148C	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2138	148B	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2139	148A	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2140	1489	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2141	1488	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2142	1487	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2143	1486	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2144	1485	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	1	-1
2145	1484	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	0	1	0	1	0	-1
2146	1483	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
2147	1482	0	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2148	1481	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	0	0
2149	1480	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2150	1481	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
2151	1482	0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2152	1483	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2153	1484	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2154	1485	0	0	-1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	-1
2155	1486	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2156	1487	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2157	1488	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
2158	1489	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	-1
2159	148A	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2160	148B	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2161	149C	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2162	149B	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2163	149A	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2164	1499	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2165	1498	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2166	1497	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2167	1496	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2168	1495	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2169	1494	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1
2170	1493	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2171	1492	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2172	1491	-1	0	0	0	-1	1	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0

2173	1490	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
2174	1491	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2175	1492	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2176	1493	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2177	1494	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2178	1495	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2179	1496	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2180	1497	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2181	1498	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2182	1499	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2183	149A	0	0	-1	0	0	0	1	0	0	1	1	1	0	1	1	0	1	0	0	0	0	0	0	-1
2184	149B	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2185	14AC	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2186	14AB	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2187	14AA	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0	-1
2188	14A9	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2189	14A8	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2190	14A7	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0
2191	14A6	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	-1
2192	14A5	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0
2193	14A4	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0
2194	14A3	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0	0
2195	14A2	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	-1
2196	14A1	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0
2197	14A0	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2198	14A1	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0
2199	14A2	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2200	14A3	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2201	14A4	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2202	14A5	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0	0
2203	14A6	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	-1
2204	14A7	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0
2205	14A8	-1	0	0	0	-1	1	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2206	14A9	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	-1	0	0	0
2207	14AA	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	-1
2208	14AB	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0
2209	14BC	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2210	14BB	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2211	14BA	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2212	14B9	0	0	-1	0	0	0	1	0	0	1	1	1	0	1	1	0	1	0	0	0	0	0	0	0
2213	14B8	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2214	14B7	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2215	14B6	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2216	14B5	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0	-1
2217	14B4	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2218	14B3	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2219	14B2	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1	0
2220	14B1	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	0	1	0	0	0	0	0	-1
2221	14B0	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2222	14B1	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
2223	14B2	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0	0
2224	14B3	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	-1
2225	14B4	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2226	14B5	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2227	14B6	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0	0

2228	$14B7$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
2229	$14B8$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2230	$14B9$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2231	$14BA$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0
2232	$14BB$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2233	$14C\bar{C}$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2234	$14C\bar{B}$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2235	$14C\bar{A}$	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2236	$14C9$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2237	$14C8$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2238	$14C7$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2239	$14C6$	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	-1	0
2240	$14C5$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2241	$14C4$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2242	$14C3$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2243	$14C2$	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1
2244	$14C1$	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
2245	$13C0$	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0
2246	$13C1$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2247	$13C2$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2248	$13C3$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2249	$13C4$	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	-1
2250	$13C5$	0	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2251	$13C6$	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2252	$13C7$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2253	$13C8$	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	-1
2254	$13C9$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2255	$13CA$	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2256	$13CB$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2257	$13C\bar{C}$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2258	$13C\bar{B}$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2259	$13C\bar{A}$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2260	$13C9$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2261	$13C8$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2262	$13C7$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2263	$13C6$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2264	$13C5$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2265	$13C4$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2266	$13C3$	0	0	0	-1	0	0	0	1	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2267	$13C2$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2268	$13C1$	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2269	$12C0$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2270	$12C1$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2271	$12C2$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2272	$12C3$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	-1	0
2273	$12C4$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2274	$12C5$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0
2275	$12C6$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2276	$12C7$	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1
2277	$12C8$	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2278	$12C9$	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0
2279	$12CA$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2280	$12CB$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2281	$12C\bar{C}$	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2282	$12C\bar{B}$	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0

2283	$1\bar{2}C\bar{A}$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2284	$1\bar{2}C9$	-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2285	$1\bar{2}C8$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2286	$1\bar{2}C7$	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2287	$1\bar{2}C6$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2288	$1\bar{2}C5$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2289	$1\bar{2}C4$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2290	$1\bar{2}C3$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2291	$1\bar{2}C2$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2292	$1\bar{2}C\bar{1}$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2293	$1\bar{1}C0$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2294	$1\bar{1}C1$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2295	$1\bar{1}C2$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2296	$1\bar{1}C3$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2297	$1\bar{1}C4$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2298	$1\bar{1}C5$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2299	$1\bar{1}C6$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2300	$1\bar{1}C7$	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2301	$1\bar{1}C8$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2302	$1\bar{1}C9$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2303	$1\bar{1}C\bar{A}$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2304	$1\bar{1}C\bar{B}$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2305	$1\bar{1}C\bar{C}$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	-1	0	0
2306	$1\bar{1}C\bar{B}$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2307	$1\bar{1}C\bar{A}$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0
2308	$1\bar{1}C9$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2309	$1\bar{1}C8$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2310	$1\bar{1}C7$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2311	$1\bar{1}C6$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2312	$1\bar{1}C5$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2313	$1\bar{1}C4$	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2314	$1\bar{1}C3$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2315	$1\bar{1}C2$	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2316	$1\bar{1}C\bar{1}$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2317	$10C0$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2318	$10C1$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2319	$10C2$	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2320	$10C3$	0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2321	$10C4$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2322	$10C5$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1
2323	$10C6$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2324	$10C7$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2325	$10C8$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2326	$10C9$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2327	$10C\bar{A}$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2328	$10C\bar{B}$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2329	$10C\bar{C}$	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2330	$10C\bar{B}$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2331	$10C\bar{A}$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2332	$10C9$	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2333	$10C8$	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2334	$10C7$	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2335	$10C6$	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2336	$10C5$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0
2337	$10C4$	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0

2338	10C3	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	-1	0	0
2339	10C2	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	-1
2340	10C1	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0
2341	11C0	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2342	11C1	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2343	11C2	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	-1
2344	11C3	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2345	11C4	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2346	11C5	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	0	0	0	0	0
2347	11C6	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	0	-1
2348	11C7	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2349	11C8	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2350	11C9	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2351	11CA	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	-1	0
2352	11CB	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2353	11CĈ	-1	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2354	11CĪ	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2355	11CĀ	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2356	11C9̄	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2357	11C8̄	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2358	11C7̄	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2359	11C6̄	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2360	11C5̄	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2361	11C4̄	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2362	11C3̄	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2363	11C2̄	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2364	11C1̄	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2365	12C0	0	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2366	12C1	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2367	12C2	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2368	12C3	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	-1
2369	12C4	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0
2370	12C5	-1	0	0	0	0	-1	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2371	12C6	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2372	12C7	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	-1
2373	12C8	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2374	12C9	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2375	12CA	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1	0	0
2376	12CB	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	-1
2377	12CĈ	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2378	12CĪ	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2379	12CĀ	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2380	12C9̄	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0	0	-1
2381	12C8̄	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2382	12C7̄	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2383	12C6̄	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2384	12C5̄	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2385	12C4̄	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0
2386	12C3̄	-1	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2387	12C2̄	-1	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2388	12C1̄	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
2389	13C0	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
2390	13C1	0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2391	13C2	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
2392	13C3	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0

2393	13C4	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
2394	13C5	0	0	0	-1	0	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0
2395	13C6	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2396	13C7	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2397	13C8	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2398	13C9	0	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	0
2399	13CA	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2400	13CB	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0
2401	13C \bar{C}	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2402	13C \bar{B}	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2403	13C \bar{A}	-1	0	0	0	0	-1	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2404	13C $\bar{9}$	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	1	-1
2405	13C $\bar{8}$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2406	13C $\bar{7}$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2407	13C $\bar{6}$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2408	13C $\bar{5}$	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	-1
2409	13C $\bar{4}$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2410	13C $\bar{3}$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2411	13C $\bar{2}$	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2412	13C $\bar{1}$	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2413	14C0	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0
2414	14C1	0	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0
2415	14C2	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2416	14C3	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2417	14C4	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2418	14C5	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0
2419	14C6	-1	0	0	0	-1	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2420	14C7	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2421	14C8	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2422	14C9	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0
2423	14CA	0	0	0	-1	0	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0
2424	14CB	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2425	14C \bar{C}	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2426	14C \bar{B}	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0
2427	14C \bar{A}	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0
2428	14C $\bar{9}$	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2429	14C $\bar{8}$	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0
2430	14C $\bar{7}$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2431	14C $\bar{6}$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0
2432	14C $\bar{5}$	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2433	14C $\bar{4}$	0	-1	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1
2434	14C $\bar{3}$	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2435	14C $\bar{2}$	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2436	14C $\bar{1}$	-1	0	0	0	0	-1	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2437	15C0	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	-1
2438	15C1	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2439	15C2	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2440	15C3	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2441	15C4	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	-1
2442	15C5	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	0
2443	15C6	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2444	15C7	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2445	15C8	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2446	15C9	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2447	15CA	0	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0

2448	15CB	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2449	15CĈ	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2450	15CĒ	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2451	15CĀ	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2452	15C9	-1	0	0	0	-1	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
2453	15C8	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2454	15C7	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	-1	0
2455	15C6	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2456	15C5	0	0	0	-1	0	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
2457	15C4	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2458	15C3	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2459	15C2	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2460	15C1	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2461	16C0	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2462	16C1	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1
2463	16C2	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2464	16C3	0	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2465	16C4	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2466	16C5	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1
2467	16C6	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2468	16C7	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2469	16C8	-1	0	0	0	0	-1	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2470	16C9	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	0	-1
2471	16CA	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2472	16CB	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2473	16CĈ	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2474	16CĒ	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	-1	0
2475	16CĀ	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2476	16C9	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2477	16C8	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2478	16C7	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2479	16C6	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2480	16C5	0	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2481	16C4	-1	0	0	0	-1	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
2482	16C3	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2483	16C2	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2484	16C1	0	0	-1	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2485	17C0	-1	0	0	0	-1	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
2486	17C1	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2487	17C2	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
2488	17C3	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
2489	17C4	-1	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0
2490	17C5	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2491	17C6	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1
2492	17C7	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2493	17C8	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
2494	17C9	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2495	17CA	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0	-1
2496	17CB	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
2497	17CĈ	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2498	17CĒ	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2499	17CĀ	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	0	-1
2500	17C9	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
2501	17C8	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
2502	17C7	-1	0	0	0	0	-1	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0

2503	17C6	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	0	1	-1	0	0
2504	17C5	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	0	0	-1
2505	17C4	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2506	17C3	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2507	17C2	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	-1
2508	17C1	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2509	18C0	0	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	0	1	0	0	0	0
2510	18C1	-1	0	0	0	-1	0	1	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2511	18C2	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2512	18C3	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2513	18C4	0	0	0	-1	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0
2514	18C5	-1	0	0	0	-1	0	0	1	0	1	0	1	0	1	1	1	0	1	0	0	0	0
2515	18C6	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2516	18C7	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2517	18C8	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2518	18C9	-1	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	1	0	1	0	0	0	0
2519	18CA	0	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2520	18CB	0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0
2521	18C \bar{C}	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0
2522	18C \bar{B}	-1	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0
2523	18C \bar{A}	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2524	18C9	0	-1	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	1	0	0
2525	18C8	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	-1
2526	18C7	0	0	0	-1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0
2527	18C6	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2528	18C5	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0
2529	18C4	0	0	-1	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	-1
2530	18C3	0	0	0	-1	0	0	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	0
2531	18C2	-1	0	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0
2532	18C1	0	-1	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	1	0	0	1	0

$$\frac{\partial f_i}{\partial t} + \frac{\mathbf{p}_i}{m_i} \cdot \nabla f_i + \mathbf{F} \cdot \frac{\partial f_i}{\partial \mathbf{p}_i} = \sum_{j=1}^n \iint g_{ij} I_{ij}(g_{ij}, \Omega) [f'_i f'_j - f_i f_j] d\Omega d^3 \mathbf{p}'$$

8 1957-2553 patterns

year		pattern																					
1891	09	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0
1891	09	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0
1893	2	0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0
1894	3	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1895	4	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1896	5	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0

1897	6	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	-1	0
1898	7	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1899	8	0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
1900	9	-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1901	a	0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1902	b	0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1903		0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	0	1	0	0	0	0	0
1904		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1905		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1906		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1907		0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1908		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1909		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1910		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1911		0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1912		-1	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0
1913		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1914		0	-1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1
1915		0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1916		-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1917		-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1918		0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	-1
1919		0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1920		-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1921		-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1922		0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	-1
1923		0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	-1
1924		0	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1925		-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1926		0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	-1
1927		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1928		0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1929		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1930		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1931		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1932		0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0
1933		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1934		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1935		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1936		0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1937		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1938		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1939		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1940		0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1941		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0
1942		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1
1943		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	-1
1944		0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1945		-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1946		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1947		0	-1	0	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	-1
1948		0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0
1949		-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0
1950		-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1
1951		0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	-1

1952			0	0	-1	0	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1953			-1	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1954			-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
1955			0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	-1	0
1956			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1957			0	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1958			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
1959			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1960			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1961			0	0	0	-1	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
1962			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
1963			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1964			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1965			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1966			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1967			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1968			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1969			0	0	0	-1	0	0	1	0	0	1	0	1	1	0	1	0	1	0	0	0	0	0	0	0
1970			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1971			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1972			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1973			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1974			-1	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1975			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1976			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1977			0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1978			-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1979			0	-1	0	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	0	1	0	0	-1	0
1980			0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
1981			0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1982			-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1983			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0	0
1984			0	-1	0	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	0	-1
1985			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0
1986			-1	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
1987			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
1988			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	0	-1
1989			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1990			0	0	0	0	-1	0	1	0	0	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0
1991			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0	0
1992			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1993			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1994			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1995			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
1996			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
1997			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
1998			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
1999			-1	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0
2000			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2001			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2002			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0
2003			-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0
2004			0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1	0
2005			0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	-1
2006			0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0

2007		-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2008		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1	0
2009		0	0	-1	0	0	0	0	1	0	0	1	1	1	0	1	1	0	0	1	0	0	0	-1
2010		0	0	0	-1	0	0	0	1	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2011		-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2012		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	0	-1
2013		0	0	-1	0	0	0	0	0	1	0	1	1	1	0	1	1	0	0	1	0	0	0	-1
2014		0	0	0	-1	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2015		-1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2016		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0
2017		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	1	0	0	1	0	0	0	-1
2018		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2019		-1	0	0	0	-1	1	0	0	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0
2020		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0
2021		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	0	-1
2022		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0
2023		-1	0	0	0	-1	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2024		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	1	0	-1	0
2025		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1	0
2026		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
2027		0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2028		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0
2029		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1	0
2030		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
2031		0	0	0	-1	0	0	1	0	0	1	0	1	1	1	0	1	0	1	0	0	0	0	0
2032		-1	0	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	0	0	0	0	0	0
2033		0	-1	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	0	0	-1	0
2034		0	0	-1	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	-1
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0
1892	1	-1	0	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	1	0	-1	0