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The Virtual Learning Environment for Computer Programming

Some sequences of bits (2)
P34343_en
Write a program that prints the number of sequences made up of exactly $z$ zeros and $u$ ones that do not contain two consecutive zeros nor three consecutive ones.

For instance, there are 8 sequences for $z=3$ and $u=4$ :

$$
\begin{array}{llllllll}
0101011 & 0101101 & 0110101 & 0110110 & 1010101 & 1010110 & 1011010 & 1101010
\end{array}
$$

## Input

Input consists of several pairs of natural numbers $z$ and $u$, each between 0 and 90 .

## Output

For every pair of $z$ and $u$, print the required number.

| Sample input | Sample output |  |
| :--- | :--- | :--- |
| 0 | 0 | 1 |
| 1 | 1 |  |
| 3 | 4 |  |
| 6590 | 2 |  |
| 8 | 8 |  |
| 2529372610666365912 |  |  |

## Problem information

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