

Fibonacci numbers, 2

In mathematics Fibonacci numbers are the the sequence of numbers such that each value is the sum of the two preceding values starting with the first two values

fib1 = 0

fib2 = 1

(Yes, there are some definitions that start with a pair: 1, 1, but for the purpose of this problem we will use the above starting values.)

Your task is to compute the N'th Fibonacci number given the number N.

Input

The first and only line of input contains the number N ($1 \leq N \leq 80$).

Output

The output contains the value of the N'th Fibonacci number followed by a newline character.

Example 1

Input:

1

Output:

0

Example 2

Input:

4

Output:

2