

# 0110SS

Dor is IWGolymp student so he has to count in how many ways he can make **N** digit numbers that is formed by ones and zeroes. But zeroes can not be next to each other. Help to him in how many different numbers can he make.

For example, **N** = 3: 101, 010, 111, 110, 011

**Note:** A leading zero is allowed.

## Input

A positive integer **N** ( $1 \leq N \leq 10000$ ).

## Output

Answer for the problem.

## Example

**Input:**

2

**Output:**

3