

@LeetCode

The **Fibonacci numbers**, commonly denoted $F(n)$ form a sequence, called the **Fibonacci sequence**, such that each number is the sum of the two preceding ones, starting from 0 and 1. That is,

$$F(0) = 0, \quad F(1) = 1$$

$$F(N) = F(N - 1) + F(N - 2), \text{ for } N > 1.$$

Given N , calculate $F(N)$.

Example 1:

Input: 2

Output: 1

Explanation: $F(2) = F(1) + F(0) = 1 + 0 = 1$.

Example 2:

Input: 3

Output: 2

Explanation: $F(3) = F(2) + F(1) = 1 + 1 = 2$.

Example 3:

Input: 4

Output: 3

Explanation: $F(4) = F(3) + F(2) = 2 + 1 = 3$.

Note:

$$0 \leq N \leq 30.$$