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## 509. Fibonacci Number

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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:

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

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