

## 509. Fibonacci Number

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,

- $F(0) = 0, F(1) = 1$
- $F(n) = F(n - 1) + F(n - 2)$ , for  $n > 1$ .

Given  $n$ , calculate  $F(n)$ .

### Example 1:

- **Input:**  $n = 2$
- **Output:** 1
- **Explanation:**  $F(2) = F(1) + F(0) = 1 + 0 = 1$ .

### Example 2:

- **Input:**  $n = 3$
- **Output:** 2
- **Explanation:**  $F(3) = F(2) + F(1) = 1 + 1 = 2$ .

### Example 3:

- **Input:**  $n = 4$
- **Output:** 3
- **Explanation:**  $F(4) = F(3) + F(2) = 2 + 1 = 3$ .

### Constraints:

- $0 \leq n \leq 30$