509. Fibonacci Number













Companies

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:

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

Example 2:

Input: n = 3Output: 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 <= n <= 30