

### Question #3: Climbing Stairs

You are climbing a staircase. It takes  $n$  steps to reach the top.

Each time you can either climb 1 or 2 steps. In how many distinct ways can you climb to the top?

#### **Example 1:**

**Input:**  $n = 2$

**Output:** 2

**Explanation:** There are two ways to climb to the top.

1. 1 step + 1 step

2. 2 steps

#### **Example 2:**

**Input:**  $n = 3$

**Output:** 3

**Explanation:** There are three ways to climb to the top.

1. 1 step + 1 step + 1 step

2. 1 step + 2 steps

3. 2 steps + 1 step