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

**Constraints:**

* 1 <= n <= 45