. Climbing Stairs

Description

Hints

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Solution

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

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Python3

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Class Solution:

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Def climbStairs(self, n: int) -> int:

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If n <= 2:

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Return n

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Dp = [0] \* (n + 1)

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Dp[1] = 1

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Dp[2] = 2

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For I in range(3, n + 1):

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Dp[i] = dp[I – 1] + dp[I – 2]

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Return dp[n]

Custom Testcase( Contribute )

Run Code: Finished

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Run Code Result:

Your input

2

Your answer

2

Expected answer

2