

137. 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?

Program:

```
def climbStairs(n):  
    if n == 1:  
        return 1  
    first, second = 1, 2  
    for i in range(3, n + 1):  
        third = first + second  
        first = second  
        second = third  
    return second
```

Example

$n = 4$

`print(climbStairs(n))`

output:

5

=== Code Execution Successful ===

TIME COMPLEXITY:- $O(n)$