

# 62. Unique Paths

## Difficulty : Medium

<https://leetcode.com/problems/unique-paths>

There is a robot on an  $m \times n$  grid. The robot is initially located at the **top-left corner** (i.e., `grid[0][0]`). The robot tries to move to the **bottom-right corner** (i.e., `grid[m - 1][n - 1]`). The robot can only move either down or right at any point in time.

Given the two integers  $m$  and  $n$ , return *the number of possible unique paths that the robot can take to reach the bottom-right corner*.

The test cases are generated so that the answer will be less than or equal to  $2 * 10^9$ .

### Example 1:



**Input:**  $m = 3, n = 7$

**Output:** 28

### Example 2:

**Input:**  $m = 3, n = 2$

**Output:** 3

**Explanation:** From the top-left corner, there are a total of 3 ways to reach the bottom-right corner:

1. Right -> Down -> Down
2. Down -> Down -> Right
3. Down -> Right -> Down

### Constraints:

- $1 \leq m, n \leq 100$