

# Leet Code

## Day-39 Q-03 Unique Paths

A robot is located at the top-left corner of a  $m \times n$  grid (marked 'Start' in the diagram below).

The robot can only move either down or right at any point in time. The robot is trying to reach the bottom-right corner of the grid (marked 'Finish' in the diagram below).

How many possible unique paths are there?



Above is a 7 x 3 grid. How many possible unique paths are there?

### Example 1:

**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 -> Right -> Down
2. Right -> Down -> Right
3. Down -> Right -> Right

### Example 2:

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

**Output:** 28

### Constraints:

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

- It's guaranteed that the answer will be less than or equal to  $2 * 10^9$ .