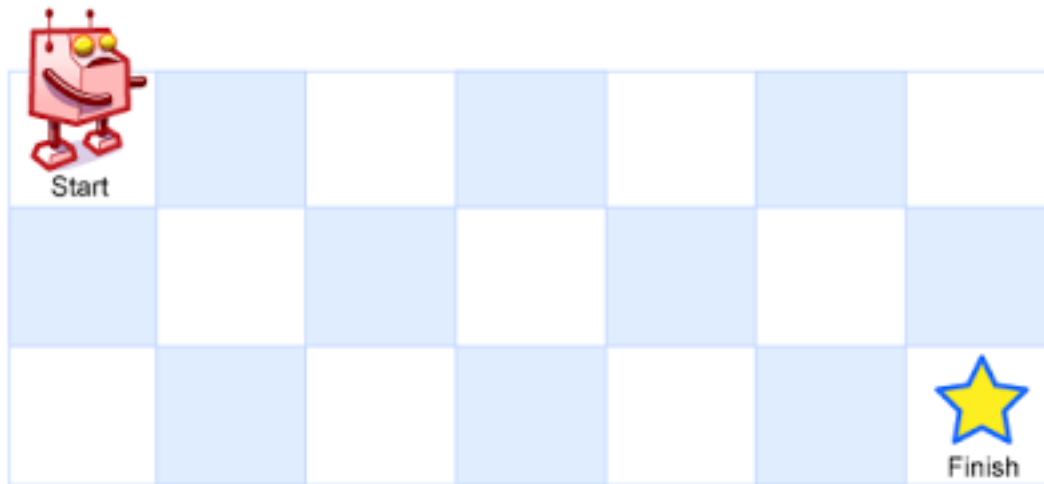


A robot is located at the top-left corner of a $m \times n$ grid (marked 'Start' in the diagram below).

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 $2 * 10^9$.