



Question 01
Problem: Unique Paths



Figure 1: Caption of the image

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 .

Examples:

- 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:
 - * Right \rightarrow Down \rightarrow Down
 - * Down \rightarrow Down \rightarrow Right
 - * Down \rightarrow Right \rightarrow Down

Constraints:

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