LeetCode Explore^Day 23 Problems Mock^new Contest Discuss 🛒 Store

🚀 September LeetCoding Challenge 🚀

⭐ Premium

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🖥 Description 🔒 Solution 💬 Discuss (999+) 🕐 Submissions

i C++ ▾ Autocomplete

A robot is located at the top-left corner of a `m x 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?

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
```

Example 3:

```
Input: m = 7, n = 3
Output: 28
```

Example 4:

```cpp
class Solution {
public:
    long long int fac(long long int n){
        if(n<2)
            return 1;
        return n*fac(n-1);
    }
    long long int pp(int n, int m){
        long long int p=1;
        for(long long int i=0;i<m;i++){
            p*=(n-i);
        }
        return p;
    }
    int uniquePaths(long long int m, long long int n) {

        m-=1;
        n-=1;
        if(n>m)
            swap(m,n);
        //m is big now
        return pp(m+n,n)/fac(n);
    }
};
```

Testcase Run Code Result Debugger 🔒

Accepted Runtime: 4 ms

Your input
```
3
7
```

Output `28` Diff

Expected `28`

📋 Problems ⤬ Pick One ‹ Prev 🐞/59 Next ›

Console ▲ How to create a testcase ▾

▶ Run Code Submit