

## 62. Unique Paths

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

给定一个  $(m * n)$  的二维数组作为棋盘，求从左上角走到右下角总共有多少种不同的方式。

解题思路:

$dp\ f[i][j] = f[i-1][j] + f[i][j-1]$

代码V1.0:

```
class Solution {
public:
    int uniquePaths(int m, int n) {
        vector<vector<int>> > f(m, vector<int>(n,0));
        for(int i = 0; i < m; i++)
            f[i][0] = 1;
        for(int j = 0; j < n; j++)
            f[0][j] = 1;
        for(int i = 1; i < m; i++){
            for(int j = 1; j < n; j++){
                f[i][j] = f[i-1][j] + f[i][j-1];
            }
        }
        return f[m-1][n-1];
    }
};
```

代码V2.0:

```
class Solution {
public:
    int uniquePaths(int m, int n) {
        vector<int> f(n+1, 0);
        for(int i = 1; i <= n; i++)
            f[i] = 1;
        for(int i = 1; i < m; i++){
            for(int j = 0; j < n; j++){
                f[j+1]= f[j+1] + f[j];
            }
        }
        return f[n];
    }
};
```