



**! Report**

Submitted on May 14, 2022, 11:29:24 AM

Penalty

Score

## Test Cases

0%

80

10/10

## Runtime

Language

1663ms

C++ (g++ 5.4)

## Previous Submissions

Submitted On	Status	Score	Penalty
1 min ago	Correct Answer 10/10 Test cases Passed	80 / 80	0%
19 mins ago	Correct Answer 10/10 Test cases Passed	80 / 80	0%
2 mins ago	Time Limit Exceeded	24 / 80	0%

```

1 int solve(int rows, int columns, vector<vector<int>>& grid, vector<vector<int>>& dp){
2     if(rows == 1 and columns == 1)
3         return grid[rows - 1][columns - 1];
4
5     if(dp[rows][columns] != -1)
6         return dp[rows][columns];
7
8     if(rows == 1)
9         return dp[rows][columns] = solve(rows, columns - 1, grid, dp) + grid[rows - 1][columns - 1];
10
11     if(columns == 1)
12         return dp[rows][columns] = solve(rows - 1, columns, grid, dp) + grid[rows - 1][columns - 1];
13
14     int top = solve(rows - 1, columns, grid, dp);
15     int left = solve(rows, columns - 1, grid, dp);
16     return dp[rows][columns] = (min(top, left) + grid[rows - 1][columns - 1]);
17 }
18 int minSumPath(vector<vector<int>> &grid) {
19     // Write your code here.
20     int rows = grid.size();
21     int columns = grid[0].size();
22     /*
23     => Call this function to see memoisation DP
24     vector<vector<int>> dp(rows + 1, vector<int>(columns + 1, -1));
25     int ans = solve(rows, columns, grid, dp);
26     return ans;
27     */
28     vector<vector<int>> dp(rows, vector<int>(columns, -1));
29     dp[0][0] = grid[0][0];
30
31     for(int rowNum = 1; rowNum < rows; rowNum++){
32         dp[rowNum][0] = dp[rowNum - 1][0] + grid[rowNum][0];
33
34     for(int columnNum = 1; columnNum < columns; columnNum++){
35         dp[0][columnNum] = dp[0][columnNum - 1] + grid[0][columnNum];
36
37     for(int i = 1; i < rows; i++){
38         for(int j = 1; j < columns; j++){
39             dp[i][j] = min(dp[i - 1][j], dp[i][j - 1]) + grid[i][j];
40         }
41     }
42
43     return dp[rows - 1][columns - 1];
44 }

```

Console ▾

## Sample Test Case

### Custom Test Case

 Download Test Cases

Test Case 1		Test Case Input
Correct Answer		5 4 3 8 1 6 4 4 16 2 7 20 20 7 20
Test Case 2		5 4 2 17 9 15 1 8 11 5 12 14 17 20 10 20 20 20 3 11 2 15 6 6 7 12 7 13 19 10 17 20 2 17 3 3 2 4 6 18 13 4 4 20 10 16 1 10 15 19 4 6 14 19 8 16 17 18 3 20
Correct Answer		4 3 5 16 2 18 17 20 17 8 4 7 3 2 3 3 6 9 3 5 20 7
Test Case 3		
Correct Answer		

