

[*] testcode.cpp

```
1  #include<bits/stdc++.h>
2  #include<vector>
3  using namespace std;
4  #define N 5
5  #define M 6
6  int c[N][M] = {{0,0,0,0,1,0}
7                ,{0,1,0,1,0,0}
8                ,{0,0,0,1,0,1}
9                ,{0,0,1,0,0,1}
10               ,{1,0,0,0,1,0}};
11 int dp[N][M];
12 int f(int x,int y)
13 {
14     if(x < 0 || x >= N || y < 0 || y >= M) return 0;
15     if(dp[x][y] != 0) return dp[x][y];
16
17     dp[x][y] = max(f(x-1,y),f(x,y-1)) + c[x][y];
18
19     return dp[x][y];
20 }
21
```

```
22 // most up left point of c is [0][0]
23 main()
24 {
25     for(int i=0;i<N;i++)
26         for(int j=0;j<M;j++)
27             dp[i][j] = 0;
28     cout<<f(N-1,M-1)<<endl;
29 }
```