/\*

Follow up for "Unique Paths":

Now consider if some obstacles are added to the grids. How many unique paths would there be?

An obstacle and empty space is marked as 1 and 0 respectively in the grid.

For example,

There is one obstacle in the middle of a 3x3 grid as illustrated below.

[

[0,0,0],

[0,1,0],

[0,0,0]

]

The total number of unique paths is 2.

还是动态规划，加一个条件而已

\*/

class Solution {

public:

int uniquePathsWithObstacles(vector<vector<int>>& obstacleGrid)

{

int row=obstacleGrid.size();

int col=obstacleGrid[0].size();

if(row>0 && col>0 && obstacleGrid[0][0]==1)

return 0;

for(int i=0;i<row;i++)

{

if(obstacleGrid[i][0]==0)

obstacleGrid[i][0]=1;

else

{

for(int j=i;j<row;j++)

obstacleGrid[j][0]=0;

break;

}

}

for(int i=1;i<col;i++)

{

if(obstacleGrid[0][i]==0)

obstacleGrid[0][i]=1;

else

{

for(int j=i;j<col;j++)

obstacleGrid[0][j]=0;

break;

}

}

for(int i=1;i<row;i++)

for(int j=1;j<col;j++)

{

if(obstacleGrid[i][j]==1)

obstacleGrid[i][j]=0;

else

obstacleGrid[i][j]=obstacleGrid[i-1][j]+obstacleGrid[i][j-1];

}

return obstacleGrid[row-1][col-1];

}

};