

ASK/VIEW DOUBT

SOLUTION

HINT

Problem

Result

Maximum Square Matrix With All Zeros

Send Feedback

Given a n*m matrix which contains only 0s and 1s, find out the size of maximum square sub-matrix with all 0s. You need to return the size of square with all 0s.

Input format :

Line 1 : n and m (space separated positive integers)
Next n lines : m elements of each row (separated by space).

Output Format:

Line 1 : Size of maximum square sub-matrix

Sample Input :

3 3
1 1 0
1 1 1
1 1 1

Sample Output :

1

1#include<bits/stdc++.h>
2using namespace std;
3int findMaxSquareWithAllZeros(int** arr, int row, int col){
4
5/* Don't write main().
6 * Don't read input, it is passed as function argument.
7 * Return output and don't print it.
8 * Taking input and printing output is handled automatically.
9 */
10
11int dp[row][col];
12for(int i=0;i<row;i++){
13for(int j=0;j<col;j++){
14
15if(i==0 || j==0){
16if(arr[i][j] == 0){
17dp[i][j] = 1;
18}else{
19dp[i][j]=0;
20}
21}else{
22if(arr[i][j]==1){
23dp[i][j]=0;
24}else{
25dp[i][j] = min(dp[i-1][j-1],min(dp[i-1][j],dp[i][j-1]))+1;
26}
27}
28}
29}
30
31int count =0;
32for(int i=0;i<row;i++){
33for(int j=0;j<col;j++){
34if(dp[i][j]>count)
35count=dp[i][j];
36
37return count;
38}
39}

← PREVIOUS

→ NEXT

CUSTOM INPUT

SUBMIT SOLUTION