

Problem

Editorial

Submissions

Doubt Support

C++ (g++ 5.4)

Test against custom input

📄

⚙️

↶

🗖

Row with max 1s

Medium

Accuracy: 42.51%

Submissions: 88757

Points: 4

Given a boolean 2D array of n x m dimensions where each row is sorted. Find the 0-based index of the first row that has the maximum number of **1**'s.

Example 1:

**Input:**  
N = 4 , M = 4  
Arr[][] = {{0, 1, 1, 1},  
              {0, 0, 1, 1},  
              {1, 1, 1, 1},  
              {0, 0, 0, 0}}

**Output:** 2  
**Explanation:** Row 2 contains 4 1's (0-based indexing).

Example 2:

**Input:**  
N = 2, M = 2  
Arr[][] = {{0, 0}, {1, 1}}

**Output:** 1  
**Explanation:** Row 1 contains 2 1's (0-based indexing).

**Your Task:**  
You don't need to read input or print anything. Your task is to complete the function **rowWithMax1s()** which takes the array of booleans **arr[][]**, **n** and **m** as input parameters and returns the 0-based index of the first row that has the most number of 1s. If no such row exists, return -1.

**Expected Time Complexity:** O(N+M)  
**Expected Auxiliary Space:** O(1)

**Constraints:**  
**Problem Solved Successfully**  
0 ≤ Arr[i][j] ≤ 1

Test Cases Passed:  
View Bookmarked Problems (https://practice.geeksforgeeks.org/explore/?problemType=bookmark)

10112 / 10112

Company Tags

Total Points Scored:  
4/4

Topic Tags

Total Time Taken:  
Your Accuracy:

Related Courses  
0.2/1.74

25%

We are replacing the old Disqus forum with the new Discussions section given below.  
Click here (https://practice.geeksforgeeks.org/comments/row-with-max-1s0023/1/?rel=https://practice.geeksforgeeks.org/problems/row-with-max-1s0023/1) to view old Attempts No.:  
Disqus comments.

4 Discussions

( 593 Threads )

B

I

🔗

⌵

⌶

🖼

↶

↷

🗑

▼

putyavka 6 hours ago

```
int rowWithMax1s(vector<vector<int>> A, int
int row = -1, j = m;
for (int i = 0; i < n && j; i++)
    while (j && A[i][j - 1]) { row = i;
return row;
}
```

Reply ↶

Open Externally ↗

Show 1 Replies

loganishanthcs19 1 day ago

PYTHON SOLUTION

class Solution:

def rowWithMax1s(self,arr, n, m):

large=0

```
15         iii) if(we find zero)
16             then store the column number and that row number
17         iv) Traverse to next row in same column(straight direction)
18         v)
19             if(arr[row][column] == 0) continue;
20             else{
21                 go to step (ii)
22             }
23         vi) Go to step (v)
24     */
25     int ansColumn = m;
26     int ansRow = 0;
27     for(int row = 0; row < n; row++){
28         while(ansColumn >= 1 and arr[row][ansColumn - 1] == 1){
29             ansColumn--;
30             ansRow = row;
31         }
32     }
33     if(ansColumn == m)
34         return -1;
35     return ansRow;
36 }
37
38
```