Problems   Courses   Get Hired   Contests   </>POTD   &G Practice   ⚡26↑ 🔍 🔔 👤

| </> Problem | 📄 Editorial | 🕘 Submissions | 💬 Comments |

The Celebrity Problem 🔖   🐞

Medium   Accuracy: **38.33%**   Submissions: **150K+**   Points: **4**

💼 **Land your Dream Job with Mega Job-a-thon. Register Now!** ↗

A celebrity is a person who is known to all but does not know anyone at a party. If you go to a party of N people, find if there is a celebrity in the party or not.

A square NxN matrix M[][] is used to represent people at the party such that if an element of row i and column j is set to 1 it means ith person knows jth person. Here M[i][i] will always be 0.

Note: Follow 0 based indexing.

Follow Up: Can you optimize it to O(N)

Example 1:

```
Input:
N = 3
M[][] = {{0 1 0},
         {0 0 0},
         {0 1 0}}
Output: 1
Explanation: 0th and 2nd person both
know 1. Therefore, 1 is the celebrity.
```

Example 2:

```
Input:
N = 2
M[][] = {{0 1},
         {1 0}}
Output: -1
Explanation: The two people at the party both
know each other. None of them is a celebrity.
```

Your Task:

You don't need to read input or print anything. Complete the function **celebrity()** which takes the matrix M and its size N as input parameters and returns the index of the celebrity. If no such celebrity is present, return -1.

Expected Time Complexity: $O(N^2)$
Expected Auxiliary Space: $O(1)$

Constraints:
$2 <= N <= 3000$
$0 <= M[][] <= 1$

View Bookmarked Problems ↗

| Company Tags | ▶ |

| Topic Tags | ▶ |

Menu   ↑