

★ Celebrity Problem

Celebrity ko sab jante hai but wo
Kisi ko nahi janta

	0	1	2
0	0	1	0
1	0	0	0
2	0	1	0

ignore diagonal
(Khud ko janta hi
hoga na pagal thodi
hai)

in ~~a~~ matrix me dekho '0' '1' ko janta hai to
matrix value = 1 but '0' '2' ko nahi janta

ab is matrix me dekho $(1,0) = 0$ i.e., '1' Kisi
 $(1,1) = 0$ ko nahi
 $(1,2) = 0$ janta

or $(0,1) = 1$ i.e., '1' ko '0' or '2' jante hai
 $(2,1) = 1$

that means 1 is celebrity

⇒ Approach (Brute force)

→ celebrity ki row me sab 0 hoge
or celebrity ke column me sab 1 hoge
except diagonal wala

```
for (i = 0 to n)
{
```

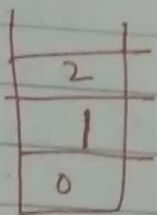
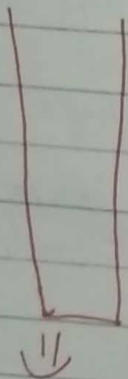
```
    row    O(N)
    +
    column O(N)
```

```
}
```

T.C. $\Rightarrow O(n^2)$

Approach (2)

Stack bana lo stack ke end me celebrity bhega



Algo:-

\hookrightarrow put all elements inside stack
 \hookrightarrow jab tak $stack\ size \neq 1$

$\hookrightarrow A \Rightarrow s.top() \rightarrow s.pop()$

$\hookrightarrow B \Rightarrow s.top() \rightarrow s.pop()$

do elements A or B ko nikal do

agar 'A' 'B' ko janta hai to discard A and push B to stack similarly opposite for B

Date

~~A ≠ Z~~
~~B ≠ 1~~

To last me single element bcha hai wo potential
ans hai

→ Verify Karo uski sari row or columns ko
check Karo based on our given condition.