277. Find the Celebrity

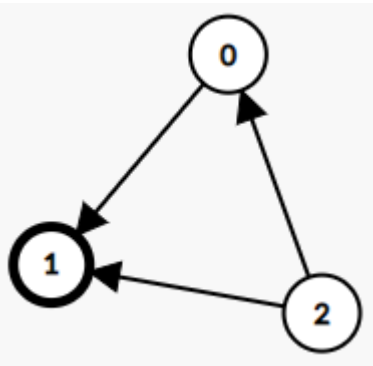
Medium 1632 166 Add to List Share

Suppose you are at a party with `n` people (labeled from `0` to `n - 1`), and among them, there may exist one
The definition of a celebrity is that all the other `n - 1` people know him/her, but he/she does not know any o

Now you want to find out who the celebrity is or verify that there is not one. The only thing you are allowed to
questions like: "Hi, A. Do you know B?" to get information about whether A knows B. You need to find out the
verify there is not one) by asking as few questions as possible (in the asymptotic sense).

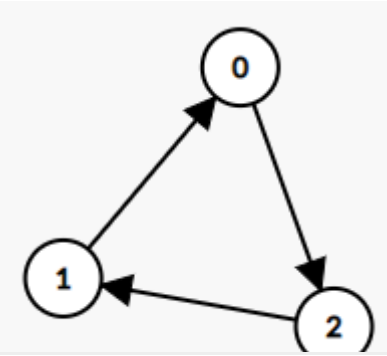
You are given a helper function `bool knows(a, b)` which tells you whether A knows B. Implement a functio
`findCelebrity(n)`. There will be exactly one celebrity if he/she is in the party. Return the celebrity's label if
celebrity in the party. If there is no celebrity, return `-1`.

Example 1:

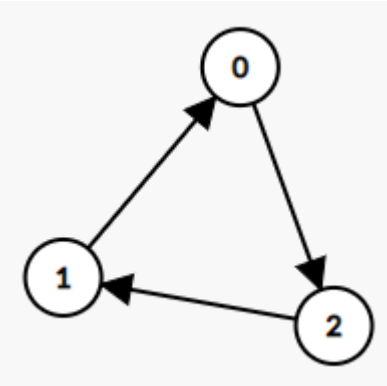



```
Input: graph = [[1,1,0],[0,1,0],[1,1,1]]
Output: 1
Explanation: There are three persons labeled with 0, 1 and 2. graph[i][j] = 1 means pers
knows person j, otherwise graph[i][j] = 0 means person i does not know person j. The cel
is the person labeled as 1 because both 0 and 2 know him but 1 does not know anybody.
```

Example 2:



Example 2:




```
Input: graph = [[1,0,1],[1,1,0],[0,1,1]]
Output: -1
Explanation: There is no celebrity.
```

Constraints:

- `n == graph.length`
- `n == graph[i].length`
- `2 <= n <= 100`
- `graph[i][j]` is `0` or `1`.
- `graph[i][i] == 1`

Follow up: If the maximum number of allowed calls to the API `knows` is `3 * n`, could you find a solution wit exceeding the maximum number of calls?

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