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LeetCode Coding Challenge + GIVEAWAY!

Description

Solution

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1101. The Earliest Moment When Everyone Become Friends

Medium

283

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There are  $n$  people in a social group labeled from  $0$  to  $n - 1$ . You are given an array `logs` where `logs[i] = [timestampi, xi, yi]` indicates that  $x_i$  and  $y_i$  will be friends at the time `timestampi`.

Friendship is **symmetric**. That means if  $a$  is friends with  $b$ , then  $b$  is friends with  $a$ . Also, person  $a$  is acquainted with a person  $b$  if  $a$  is friends with  $b$ , or  $a$  is a friend of someone acquainted with  $b$ .

Return the *earliest time for which every person became acquainted with every other person*. If there is no such earliest time, return `-1`.

Example 1:

Input:

`logs = [[20190101,0,1],[20190104,3,4],[20190107,2,3],[20190211,1,5],[20190224,2,4],[20190301,0,3],[20190312,1,2],[20190322,4,5]], n = 6`

Output:

`20190301`

Explanation:

The first event occurs at `timestamp = 20190101` and after  $0$  and  $1$  become friends we have the following friendship groups `[0,1]`, `[2]`, `[3]`, `[4]`, `[5]`.

The second event occurs at `timestamp = 20190104` and after  $3$  and  $4$  become friends we have the following friendship groups `[0,1]`, `[2]`, `[3,4]`, `[5]`.

The third event occurs at `timestamp = 20190107` and after  $2$  and  $3$  become friends we have the following friendship groups `[0,1]`, `[2,3,4]`, `[5]`.

The fourth event occurs at `timestamp = 20190211` and after  $1$  and  $5$  become friends we have the following friendship groups `[0,1,5]`, `[2,3,4]`.

The fifth event occurs at `timestamp = 20190224` and as  $2$  and  $4$  are already friends anything happens.

The sixth event occurs at `timestamp = 20190301` and after  $0$  and  $3$  become friends we have that all become friends.

Example 2:

Input:

`logs = [[0,2,0],[1,0,1],[3,0,3],[4,1,2],[7,3,1]], n = 4`

Output:

`3`

Constraints:

- $2 \leq n \leq 100$
- $1 \leq \text{logs.length} \leq 10^4$
- `logs[i].length == 3`
- $0 \leq \text{timestamp}_i \leq 10^9$
- $0 \leq x_i, y_i \leq n - 1$
- $x_i \neq y_i$
- All the values `timestampi` are **unique**.
- All the pairs  $(x_i, y_i)$  occur at most one time in the input.

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```
1 class Solution {
2     public int earliestAcq(int[][] logs, int n) {
3
4     }
5 }
```

https://leetcode.com/problems/the-earliest-moment-when-everyone-become-friends/

1/1