5442. Avoid Flood in The City

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User Accepted:	7
User Tried:	42
Total Accepted:	7
Total Submissions:	68
Difficulty:	Medium

Your country has an infinite number of lakes. Initially, all the lakes are empty, but when it rains over the `nth` lake, the `nth` lake becomes full of water. If it rains over a lake which is **full of water**, there will be a **flood**. Your goal is to avoid the flood in any lake.

Given an integer array `rains` where:

- `rains[i] > 0` means there will be rains over the `rains[i]` lake.
- `rains[i] == 0` means there are no rains this day and you can choose **one lake** this day and **dry it**.

Return *an array* `ans` where:

- `ans.length == rains.length`
- `ans[i] == -1` if `rains[i] > 0`.
- `ans[i]` is the lake you choose to dry in the `ith` day if `rains[i] == 0`.

If there are multiple valid answers return **any** of them. If it is impossible to avoid flood return **an empty array**.

Notice that if you chose to dry a full lake, it becomes empty, but if you chose to dry an empty lake, nothing changes. (see example 4)

Example 1:

```
Input: rains = [1,2,3,4]
Output: [-1,-1,-1,-1]
Explanation: After the first day full lakes are [1]
After the second day full lakes are [1,2]
After the third day full lakes are [1,2,3]
After the fourth day full lakes are [1,2,3,4]
There's no day to dry any lake and there is no flood in any lake.
```

Example 2:

```
Input: rains = [1,2,0,0,2,1]
Output: [-1,-1,2,1,-1,-1]
Explanation: After the first day full lakes are [1]
After the second day full lakes are [1,2]
After the third day, we dry lake 2. Full lakes are [1]
After the fourth day, we dry lake 1. There is no full lakes.
After the fifth day, full lakes are [2].
After the sixth day, full lakes are [1,2].
It is easy that this scenario is flood-free. [-1,-1,1,2,-1,-1] is another acceptable scena
```

Example 3:

```
Input: rains = [1,2,0,1,2]
Output: []
Explanation: After the second day, full lakes are  [1,2]. We have to dry one lake in the t
After that, it will rain over lakes [1,2]. It's easy to prove that no matter which lake yo
```

Example 4:

```
Input: rains = [69,0,0,0,69]
Output: [-1,69,1,1,-1]
Explanation: Any solution on one of the forms [-1,69,x,y,-1], [-1,x,69,y,-1] or [-1,x,y,69
```

Example 5:

```
Input: rains = [10,20,20]
Output: []
Explanation: It will rain over lake 20 two consecutive days. There is no chance to dry any
```

Constraints:

- `1 <= rains.length <= 10^5`
- `0 <= rains[i] <= 10^9`

JavaScript

```javascript
/**
 * @param {number[]} rains
 * @return {number[]}
 */
var avoidFlood = function(rains) {

};
```