100143. Count Tested Devices After Test Operations

My Submissions (/contest/weekly-contest-375/problems/count-tested-devices-after-test-operations/submissions/)

Back to Contest (/contest/weekly-contest-375/)

You are given a **0-indexed** integer array `batteryPercentages` having length `n`, denoting the battery percentages of `n` **0-indexed** devices.

Your task is to test each device `i` **in order** from `0` to `n - 1`, by performing the following test operations:

- If `batteryPercentages[i]` is **greater** than `0`:
  - **Increment** the count of tested devices.
  - **Decrease** the battery percentage of all devices with indices `j` in the range `[i + 1, n - 1]` by `1`, ensuring their battery percentage **never goes below** `0`, i.e, `batteryPercentages[j] = max(0, batteryPercentages[j] - 1)`.
  - Move to the next device.
- Otherwise, move to the next device without performing any test.

Return *an integer denoting the number of devices that will be tested after performing the test operations in order.*

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Easy

Example 1:

```
Input: batteryPercentages = [1,1,2,1,3]
Output: 3
Explanation: Performing the test operations in order starting from device 0:
At device 0, batteryPercentages[0] > 0, so there is now 1 tested device, and batteryPercentages becomes [1,0,1,0,2].
At device 1, batteryPercentages[1] == 0, so we move to the next device without testing.
At device 2, batteryPercentages[2] > 0, so there are now 2 tested devices, and batteryPercentages becomes [1,0,1,0,1].
At device 3, batteryPercentages[3] == 0, so we move to the next device without testing.
At device 4, batteryPercentages[4] > 0, so there are now 3 tested devices, and batteryPercentages stays the same.
So, the answer is 3.
```

Example 2:

```
Input: batteryPercentages = [0,1,2]
Output: 2
Explanation: Performing the test operations in order starting from device 0:
At device 0, batteryPercentages[0] == 0, so we move to the next device without testing.
At device 1, batteryPercentages[1] > 0, so there is now 1 tested device, and batteryPercentages becomes [0,1,1].
At device 2, batteryPercentages[2] > 0, so there are now 2 tested devices, and batteryPercentages stays the same.
So, the answer is 2.
```

Constraints:

- `1 <= n == batteryPercentages.length <= 100`
- `0 <= batteryPercentages[i] <= 100`

JavaScript

```javascript
const countTestedDevices = (a) => {
    let n = a.length, res = 0;
    for (let i = 0; i < n; i++) {
        if (a[i] > 0) {
            res++;
            for (let j = i + 1; j < n; j++)a[j]--;
        }
    }
    return res;
```

```
10 };
```

Custom Testcase | Use Example Testcases

Run | Submit

Submission Result: Accepted (/submissions/detail/1116129307/) | More Details > (/submissions/detail/1116129307/)

Share your acceptance!