1846. Maximum Element After Decreasing and Rearranging

Hint

Medium 428 102

Companies

You are given an array of positive integers `arr`. Perform some operations (possibly none) on `arr` so that it satisfies these conditions:

- The value of the **first** element in `arr` must be `1`.
- The absolute difference between any 2 adjacent elements must be **less than or equal to** `1`. In other words, `abs(arr[i] - arr[i - 1]) <= 1` for each `i` where `1 <= i < arr.length` (**0-indexed**). `abs(x)` is the absolute value of `x`.

There are 2 types of operations that you can perform any number of times:

- **Decrease** the value of any element of `arr` to a **smaller positive integer**.
- **Rearrange** the elements of `arr` to be in any order.

Return *the **maximum** possible value of an element in* `arr` *after performing the operations to satisfy the conditions.*

Code

```
class Solution {
    func maximumElementAfterDecrementingAndRearranging(_ arr:
[Int]) -> Int {
        var brr = arr.sorted()
        brr[0] = 1
        var maxval = 1
        for i in (1..<brr.count) {
            if((brr[i] - brr[i-1]) <= 1) {
                maxval = max(brr[i],maxval)
            } else {
                brr[i] = brr[i-1] + 1
                maxval = max(brr[i],maxval)
            }
        }
        return maxval
    }
}
```