

1243. Array Transformation Premium

Easy Topics Companies Hint

Given an initial array `arr`, every day you produce a new array using the array of the previous day.

On the `i`-th day, you do the following operations on the array of day `i-1` to produce the array of day `i`:

- If an element is smaller than both its left neighbor and its right neighbor, then this element is incremented.
- If an element is bigger than both its left neighbor and its right neighbor, then this element is decremented.
- The first and last elements never change.

After some days, the array does not change. Return that final array.

Example 1:

Input: `arr = [6,2,3,4]`
Output: `[6,3,3,4]`
Explanation:
On the first day, the array is changed from `[6,2,3,4]` to `[6,3,3,4]`.
No more operations can be done to this array.

Example 2:

Input: `arr = [1,6,3,4,3,5]`
Output: `[1,4,4,4,4,5]`
Explanation:
On the first day, the array is changed from `[1,6,3,4,3,5]` to `[1,5,4,3,4,5]`.
On the second day, the array is changed from `[1,5,4,3,4,5]` to `[1,4,4,4,4,5]`.
No more operations can be done to this array.

Constraints:

- `3 <= arr.length <= 100`
- `1 <= arr[i] <= 100`

Seen this question in a real interview before? 1/5

Yes No

Accepted 14.1K | Submissions 26.8K | Acceptance Rate 52.6%

Topics

ArraySimulation

Companies

0 - 6 months

Virtu Financial3

Hint 1

Try to simulate the process.

Hint 2

For every iteration, find the new array using the old one and the given rules.

Discussion (2)