3350. Adjacent Increasing Subarrays Detection II

Solved ●

Medium Topics Companies Hint

Given an array `nums` of `n` integers, your task is to find the **maximum** value of `k` for which there exist **two** adjacent

subarrays of length `k` each, such that both subarrays are **strictly increasing**. Specifically, check if there are **two** subarrays of length `k` starting at indices `a` and `b` (`a < b`), where:

- Both subarrays `nums[a..a + k - 1]` and `nums[b..b + k - 1]` are **strictly increasing**.
- The subarrays must be **adjacent**, meaning `b = a + k`.

Return the **maximum** *possible* value of `k`.

A **subarray** is a contiguous **non-empty** sequence of elements within an array.

Example 1:

> **Input:** nums = [2,5,7,8,9,2,3,4,3,1]
>
> **Output:** 3
>
> **Explanation:**
>
> - The subarray starting at index 2 is `[7, 8, 9]`, which is strictly increasing.
> - The subarray starting at index 5 is `[2, 3, 4]`, which is also strictly increasing.
> - These two subarrays are adjacent, and 3 is the **maximum** possible value of `k` for which two such adjacent strictly increasing subarrays exist.

Example 2:

> **Input:** nums = [1,2,3,4,4,4,4,5,6,7]
>
> **Output:** 2
>
> **Explanation:**
>
> - The subarray starting at index 0 is `[1, 2]`, which is strictly increasing.
> - The subarray starting at index 2 is `[3, 4]`, which is also strictly increasing.
> - These two subarrays are adjacent, and 2 is the **maximum** possible value of `k` for which two such adjacent strictly increasing subarrays exist.

Constraints:

- `2 <= nums.length <= 2 * 10^5`
- `-10^9 <= nums[i] <= 10^9`

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

Yes No

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Hint 1

Hint 2

Discussion (26)