

2443. Check if There is a Valid Partition For The Array

Difficulty : Medium

<https://leetcode.com/problems/check-if-there-is-a-valid-partition-for-the-array>

You are given a **0-indexed** integer array `nums`. You have to partition the array into one or more **contiguous** subarrays.

We call a partition of the array **valid** if each of the obtained subarrays satisfies **one** of the following conditions:

1. The subarray consists of **exactly** 2, equal elements. For example, the subarray `[2,2]` is good.
2. The subarray consists of **exactly** 3, equal elements. For example, the subarray `[4,4,4]` is good.
3. The subarray consists of **exactly** 3 consecutive increasing elements, that is, the difference between adjacent elements is 1. For example, the subarray `[3,4,5]` is good, but the subarray `[1,3,5]` is not.

Return `true` *if the array has **at least** one valid partition*. Otherwise, return `false`.

Example 1:

Input: `nums = [4,4,4,5,6]`

Output: `true`

Explanation: The array can be partitioned into the subarrays `[4,4]` and `[4,5,6]`. This partition is valid, so we return `true`.

Example 2:

Input: `nums = [1,1,1,2]`

Output: `false`

Explanation: There is no valid partition for this array.

Constraints:

- $2 \leq \text{nums.length} \leq 10^5$
- $1 \leq \text{nums}[i] \leq 10^6$