6137. Check if There is a Valid Partition For The Array

My Submissions (/contest/weekly-contest-305/problems/check-if-there-is-a-valid-partition-for-the-array/submissions/)

Back to Contest (/contest/weekly-contest-305/)

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`.

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

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 <= nums.length <= 10^5`
- `1 <= nums[i] <= 10^6`

JavaScript

```
const validPartition = (a) => {
    let n = a.length, dp = Array(n + 1).fill(false);
    dp[0] = true;
    for (let i = 2; i <= n; i++) {
        if (dp[i - 2] && a[i - 2] == a[i - 1]) dp[i] = true;
        if (i - 3 >= 0 && dp[i - 3] && a[i - 1] == a[i - 2] && a[i - 2] == a[i - 3]) dp[i] = true;
        if (i - 3 >= 0 && dp[i - 3] && a[i - 1] - a[i - 2] == 1 && a[i - 2] - a[i - 3] == 1) dp[i] = true;
    }
    return dp[n];
};
```

Custom Testcase Use Example Testcases

Run Submit

Submission Result: Accepted (/submissions/detail/767259848/) More Details > (/submissions/detail/767259848/)

Share your acceptance!