

Problem 3721: Longest Balanced Subarray II

Problem Information

Difficulty: Hard

Acceptance Rate: 11.06%

Paid Only: No

Tags: Array, Hash Table, Divide and Conquer, Segment Tree, Prefix Sum

Problem Description

You are given an integer array `nums`.

A **subarray** is called **balanced** if the number of **distinct even** numbers in the subarray is equal to the number of **distinct odd** numbers.

Return the length of the **longest** balanced subarray.

Example 1.

Input: `nums = [2,5,4,3]`

Output: 4

Explanation:

* The longest balanced subarray is `[2, 5, 4, 3]`. * It has 2 distinct even numbers `[2, 4]` and 2 distinct odd numbers `[5, 3]`. Thus, the answer is 4.

Example 2.

Input: `nums = [3,2,2,5,4]`

Output: 5

Explanation:

* The longest balanced subarray is `[3, 2, 2, 5, 4]`. * It has 2 distinct even numbers `[2, 4]` and 2 distinct odd numbers `[3, 5]`. Thus, the answer is 5.

****Example 3:****

****Input:**** nums = [1,2,3,2]

****Output:**** 3

****Explanation:****

* The longest balanced subarray is `[2, 3, 2]`. * It has 1 distinct even number `[2]` and 1 distinct odd number `[3]`. Thus, the answer is 3.

****Constraints:****

* `1 <= nums.length <= 105` * `1 <= nums[i] <= 105`

Code Snippets

C++:

```
class Solution {
public:
    int longestBalanced(vector<int>& nums) {

    }
};
```

Java:

```
class Solution {
    public int longestBalanced(int[] nums) {

    }
}
```

Python3:

```
class Solution:
    def longestBalanced(self, nums: List[int]) -> int:
```