Problem 3206: Alternating Groups I

Problem Information

Difficulty: Easy
Acceptance Rate: 68.41%
Paid Only: No
Tags: Array, Sliding Window

Problem Description

There is a circle of red and blue tiles. You are given an array of integers `colors`. The color of tile `i` is represented by `colors[i]`:

* `colors[i] == 0` means that tile `i` is **red**. * `colors[i] == 1` means that tile `i` is **blue**.

Every 3 contiguous tiles in the circle with **alternating** colors (the middle tile has a different color from its **left** and **right** tiles) is called an **alternating** group.

Return the number of **alternating** groups.

Note that since `colors` represents a **circle** , the **first** and the **last** tiles are considered to be next to each other.

Example 1:

Input: colors = [1,1,1]

Output: 0

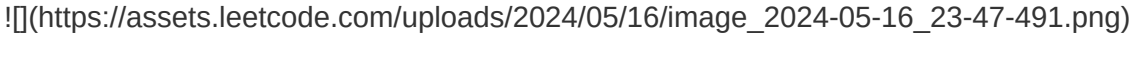
Explanation:

Example 2:

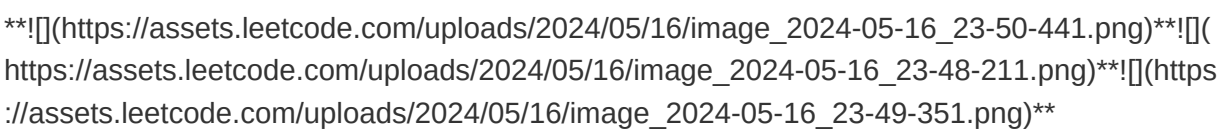
Input: colors = [0,1,0,0,1]

Output: 3

Explanation:



Alternating groups:



Constraints:

* `3 <= colors.length <= 100` * `0 <= colors[i] <= 1`

Code Snippets

C++:

```
class Solution {
public:
int numberOfAlternatingGroups(vector<int>& colors) {

}
};
```

Java:

```
class Solution {
public int numberOfAlternatingGroups(int[] colors) {

}
}
```

Python3:

```
class Solution:
def numberOfAlternatingGroups(self, colors: List[int]) -> int:
```