3208. Alternating Groups II

Solved ●

Medium Topics Companies Hint

There is a circle of red and blue tiles. You are given an array of integers `colors` and an integer `k`. 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**.

An **alternating** group is every `k` contiguous tiles in the circle with **alternating** colors (each tile in the group except the first and last one has a different color from its **left** and **right** tiles).

Return the number of **alternating** groups.

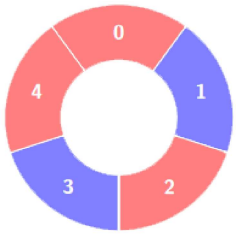
Note that since `colors` represents a **circle**, the **first** and the **last** tiles are considered to be next to each other.

Example 1:

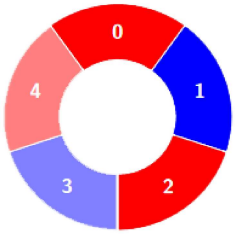
Input: colors = [0,1,0,1,0], k = 3

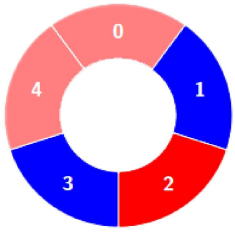
Output: 3

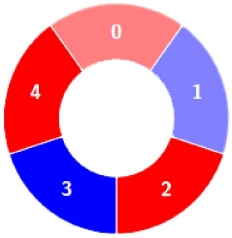
Explanation:



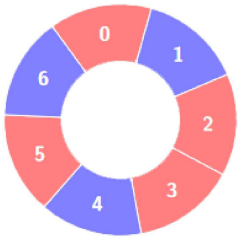
Alternating groups:







Example 2:

> **Input:** colors = [0,1,0,0,1,0,1], k = 6
>
> **Output:** 2
>
> **Explanation:**
>
> 
>
>
> Alternating groups:
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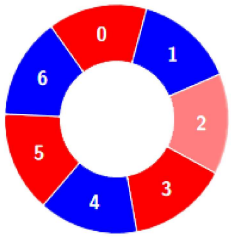
> 
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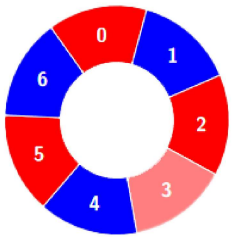
> 
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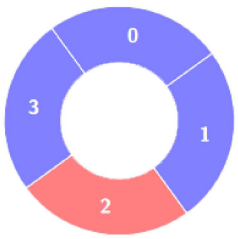
Example 3:

> **Input:** colors = [1,1,0,1], k = 4
>
> **Output:** 0
>
> **Explanation:**
>
> 
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Constraints:

- $3 <= colors.length <= 10^5$
- $0 <= colors[i] <= 1$
- $3 <= k <= colors.length$

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

Yes No

Accepted 142.5K Submissions 238.2K Acceptance Rate 59.8%

Topics

Companies

Hint 1

Hint 2

Discussion (174)