2078. Two Furthest Houses With Different Colors

Description

There are `n` houses evenly lined up on the street, and each house is beautifully painted. You are given a **0-indexed** integer array `colors` of length `n`, where `colors[i]` represents the color of the `i th` house.

Return *the* ***maximum*** *distance between* ***two*** *houses with* ***different*** *colors*.

The distance between the `i th` and `j th` houses is `abs(i - j)`, where `abs(x)` is the **absolute value** of `x`.

Example 1:


```
Input: colors = [1,1,1,6,1,1,1]
Output: 3
Explanation: In the above image, color 1 is blue, and color 6 is red.
The furthest two houses with different colors are house 0 and house 3.
House 0 has color 1, and house 3 has color 6. The distance between them is abs(0 - 3) = 3.
Note that houses 3 and 6 can also produce the optimal answer.
```

Example 2:


```
Input: colors = [1,8,3,8,3]
Output: 4
Explanation: In the above image, color 1 is blue, color 8 is yellow, and color 3 is green.
The furthest two houses with different colors are house 0 and house 4.
House 0 has color 1, and house 4 has color 3. The distance between them is abs(0 - 4) = 4.
```

Example 3:

```
Input: colors = [0,1]
Output: 1
Explanation: The furthest two houses with different colors are house 0 and house 1.
House 0 has color 0, and house 1 has color 1. The distance between them is abs(0 - 1) = 1.
```

Constraints:

- `n == colors.length`
- `2 <= n <= 100`
- `0 <= colors[i] <= 100`
- Test data are generated such that **at least** two houses have different colors.