

5930. Two Furthest Houses With Different Colors

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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 $\text{abs}(i - j)$, where $\text{abs}(x)$ 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 $\text{abs}(0 - 3) = 3$. 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 $\text{abs}(0 - 4) = 4$.

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 $\text{abs}(0 - 1) = 1$.

Constraints:

- $n == \text{colors.length}$
- $2 \leq n \leq 100$
- $0 \leq \text{colors}[i] \leq 100$
- Test data are generated such that **at least** two houses have different colors.

JavaScript



```
1 /**
2  * @param {number[]} colors
3  * @return {number}
4  */
5 var maxDistance = function(colors) {
```