

5659. Minimum Length of String After Deleting Similar Ends

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Given a string `s` consisting only of characters `'a'`, `'b'`, and `'c'`. You are asked to apply the following algorithm on the string any number of times:

- 1. Pick a **non-empty** prefix from the string `s` where all the characters in the prefix are equal.
- 2. Pick a **non-empty** suffix from the string `s` where all the characters in this suffix are equal.
- 3. The prefix and the suffix should not intersect at any index.
- 4. The characters from the prefix and suffix must be the same.
- 5. Delete both the prefix and the suffix.

Return the **minimum length** of `s` after performing the above operation any number of times (possibly zero times).

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: `s = "ca"`

Output: 2

Explanation: You can't remove any characters, so the string stays as is.

Example 2:

Input: `s = "cabaabac"`

Output: 0

Explanation: An optimal sequence of operations is:

- Take prefix = `"c"` and suffix = `"c"` and remove them, `s = "abaaba"`.
- Take prefix = `"a"` and suffix = `"a"` and remove them, `s = "baab"`.
- Take prefix = `"b"` and suffix = `"b"` and remove them, `s = "aa"`.
- Take prefix = `"a"` and suffix = `"a"` and remove them, `s = ""`.

Example 3:

Input: `s = "aabccabba"`

Output: 3

Explanation: An optimal sequence of operations is:

- Take prefix = `"aa"` and suffix = `"a"` and remove them, `s = "bccabb"`.
- Take prefix = `"b"` and suffix = `"bb"` and remove them, `s = "cca"`.

Constraints:

- $1 \leq s.length \leq 10^5$
- `s` only consists of characters `'a'`, `'b'`, and `'c'`.

JavaScript

```
1 /**
2  * @param {string} s
3  * @return {number}
4  */
5 var minimumLength = function(s) {
6
7 };
```