

Problem 1234: Replace the Substring for Balanced String

Problem Information

Difficulty: **Medium**

Acceptance Rate: 40.28%

Paid Only: No

Tags: String, Sliding Window

Problem Description

You are given a string s of length n containing only four kinds of characters: 'Q', 'W', 'E', and 'R'.

A string is said to be **balanced** if each of its characters appears $n / 4$ times where n is the length of the string.

Return the minimum length of the substring that can be replaced with **any** other string of the same length to make s **balanced**. If s is already **balanced**, return 0.

Example 1:

Input: $s = \text{"QWER"}$ **Output:** 0 **Explanation:** s is already balanced.

Example 2:

Input: $s = \text{"QQWE"}$ **Output:** 1 **Explanation:** We need to replace a 'Q' to 'R', so that "RQWE" (or "QRWE") is balanced.

Example 3:

Input: $s = \text{"QQQW"}$ **Output:** 2 **Explanation:** We can replace the first "QQ" to "ER".

Constraints:

* `n == s.length` * `4 <= n <= 105` * `n` is a multiple of `4`. * `s` contains only `'Q'`, `'W'`, `'E'`, and `'R'`.

Code Snippets

C++:

```
class Solution {  
public:  
    int balancedString(string s) {  
  
    }  
};
```

Java:

```
class Solution {  
    public int balancedString(String s) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def balancedString(self, s: str) -> int:
```