

Problem 696: Count Binary Substrings

Problem Information

Difficulty: Easy

Acceptance Rate: 66.26%

Paid Only: No

Tags: Two Pointers, String

Problem Description

Given a binary string `s`, return the number of non-empty substrings that have the same number of `0`'s and `1`'s, and all the `0`'s and all the `1`'s in these substrings are grouped consecutively.

Substrings that occur multiple times are counted the number of times they occur.

Example 1:

Input: `s = "00110011"` **Output:** 6 **Explanation:** There are 6 substrings that have equal number of consecutive 1's and 0's: "0011", "01", "1100", "10", "0011", and "01". Notice that some of these substrings repeat and are counted the number of times they occur. Also, "00110011" is not a valid substring because all the 0's (and 1's) are not grouped together.

Example 2:

Input: `s = "10101"` **Output:** 4 **Explanation:** There are 4 substrings: "10", "01", "10", "01" that have equal number of consecutive 1's and 0's.

Constraints:

`1 <= s.length <= 105` `s[i]` is either `'0'` or `'1'`.

Code Snippets

C++:

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

Java:

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

Python3:

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