

Problem 2730: Find the Longest Semi-Repetitive Substring

Problem Information

Difficulty: Medium

Acceptance Rate: 38.06%

Paid Only: No

Tags: String, Sliding Window

Problem Description

You are given a digit string `s` that consists of digits from 0 to 9.

A string is called **“semi-repetitive”** if there is **“at most”** one adjacent pair of the same digit. For example, `"0010"`, `"002020"`, `"0123"`, `"2002"`, and `"54944"` are semi-repetitive while the following are not: `"00101022"`, (adjacent same digit pairs are 00 and 22), and `"1101234883"`, (adjacent same digit pairs are 11 and 88).

Return the length of the **“longest semi-repetitive substring”** of `s` .

Example 1:

Input: s = "52233"

Output: 4

Explanation:

The longest semi-repetitive substring is "5223". Picking the whole string "52233" has two adjacent same digit pairs 22 and 33, but at most one is allowed.

Example 2:

Input: s = "5494"

****Output:**** 4

****Explanation:****

`s` is a semi-repetitive string.

****Example 3:****

****Input:**** s = "1111111"

****Output:**** 2

****Explanation:****

The longest semi-repetitive substring is "11". Picking the substring "111" has two adjacent same digit pairs, but at most one is allowed.

****Constraints:****

* `1 <= s.length <= 50` * `0 <= s[i] <= 9`

Code Snippets

C++:

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

Java:

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

Python3:

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