

Problem 1682: Longest Palindromic Subsequence II

Problem Information

Difficulty: Medium

Acceptance Rate: 50.35%

Paid Only: Yes

Tags: String, Dynamic Programming

Problem Description

A subsequence of a string `s` is considered a **“good palindromic subsequence”** if:

* It is a subsequence of `s`. * It is a palindrome (has the same value if reversed). * It has an **“even”** length. * No two consecutive characters are equal, except the two middle ones.

For example, if `s = "abcabcabb"`, then `“abba”` is considered a **“good palindromic subsequence”**, while `“bcb”` (not even length) and `“bbbb”` (has equal consecutive characters) are not.

Given a string `s`, return the**“length”** of the **“longest good palindromic subsequence”** in “s”.

Example 1:

Input: s = "babab" **Output:** 4 **Explanation:** The longest good palindromic subsequence of s is "bab".

Example 2:

Input: s = "dcbccacdb" **Output:** 4 **Explanation:** The longest good palindromic subsequence of s is "cccd".

Constraints:

* `1 <= s.length <= 250` * `s` consists of lowercase English letters.

Code Snippets

C++:

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

Java:

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

Python3:

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