

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 = "bbabab"` **Output:** `4` **Explanation:** The longest good palindromic subsequence of `s` is `"baab"`.

Example 2:

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

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:
```