

1930. Unique Length-3 Palindromic Subsequences

Description

Given a string `s`, return *the number of unique palindromes of length three that are a subsequence of* `s`.

Note that even if there are multiple ways to obtain the same subsequence, it is still only counted **once**.

A **palindrome** is a string that reads the same forwards and backwards.

A **subsequence** of a string is a new string generated from the original string with some characters (can be none) deleted without changing the relative order of the remaining characters.

- For example, `"ace"` is a subsequence of `"a b c d e"`.

Example 1:

```
Input: s = "aabca"
Output: 3
Explanation: The 3 palindromic subsequences of length 3 are:
- "aba" (subsequence of "a a b c a")
- "aaa" (subsequence of "a a b c a")
- "aca" (subsequence of "a a b c a")
```

Example 2:

```
Input: s = "adc"
Output: 0
Explanation: There are no palindromic subsequences of length 3 in "adc".
```

Example 3:

```
Input: s = "bbcbaba"
Output: 4
Explanation: The 4 palindromic subsequences of length 3 are:
- "bbb" (subsequence of "b b c b a b a")
- "bcb" (subsequence of "b b c b a b a")
- "bab" (subsequence of "b b c b a b a")
- "aba" (subsequence of "b b c b a b a")
```

Constraints:

- $3 \leq s.length \leq 10^5$
- `s` consists of only lowercase English letters.

