730. Count Different Palindromic Subsequences

Description

Given a string s, return *the number of different non-empty palindromic subsequences in* `s` . Since the answer may be very large, return it **modulo** `10^9 + 7` .

A subsequence of a string is obtained by deleting zero or more characters from the string.

A sequence is palindromic if it is equal to the sequence reversed.

Two sequences `a_1, a_2, ...` and `b_1, b_2, ...` are different if there is some `i` for which `a_i != b_i` .

Example 1:

```
Input: s = "bccb"
Output: 6
Explanation: The 6 different non-empty palindromic subsequences are 'b', 'c', 'bb', 'cc', 'bcb', 'bccb'.
Note that 'bcb' is counted only once, even though it occurs twice.
```

Example 2:

```
Input: s = "abcdabcdabcdabcdabcdabcdabcdabcddcbadcbadcbadcbadcbadcbadcbadcba"
Output: 104860361
Explanation: There are 3104860382 different non-empty palindromic subsequences, which is 104860361 modulo 10^9 + 7.
```

Constraints:

- `1 <= s.length <= 1000`
- `s[i]` is either `'a'` , `'b'` , `'c'` , or `'d'` .