

940. Distinct Subsequences II

Description

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

A **subsequence** of a string is a new string that is formed from the original string by deleting some (can be none) of the characters without disturbing the relative positions of the remaining characters. (i.e., `"ace"` is a subsequence of `"a b c d e"` while `"aec"` is not.

Example 1:

Input: `s = "abc"`

Output: 7

Explanation: The 7 distinct subsequences are "a", "b", "c", "ab", "ac", "bc", and "abc".

Example 2:

Input: `s = "aba"`

Output: 6

Explanation: The 6 distinct subsequences are "a", "b", "ab", "aa", "ba", and "aba".

Example 3:

Input: `s = "aaa"`

Output: 3

Explanation: The 3 distinct subsequences are "a", "aa" and "aaa".

Constraints:

- `1 <= s.length <= 2000`
- `s` consists of lowercase English letters.

