1157 – LCS Revisited

LCS means 'Longest Common Subsequence' that means two non-empty strings are given; the longest subsequence that are common. Subsequence means removing 0 or more characters from a string.

Now you are given two non-empty strings **s** and **t**, your task is to find the number of distinct LCS of **s** and **t**. Since the result can be very big, print the result modulo **1000007**.

Input

Input starts with an integer **T (≤ 200)**, denoting the number of test cases.

Each case contains two lines, the first line is the string **s** and the second line is the string **t**. You may assume that the strings are non-empty and consist only of lowercase letters and the length of the each string is at most **1000**.

Output

For each case, print the case number and the number of distinct LCS of **s** and **t** modulo **1000007**.

Sample Input	Output for Sample Input
4 acbd acbd vnvn vn ab ba xyz abc	Case 1: 1 Case 2: 1 Case 3: 2 Case 4: 1