A **palindrome** is a string that reads the same from the left as it does from the right. Given two strings **A** and **B**, you need to find the length of longest palindrome which is a subsequence of both **A** and **B**. A subsequence is a sequence obtained by deleting zero or more characters from a string.

For example, say, **A** = “cfcfaafc”, **B** = “efagfc”. Then the longest palindrome which is a subsequence of both A and B is “faf”. So the answer is 3.

**Input**

First line of the input contains a positive integer **T**(**T** <= 100). Each of the following **T** cases consists of 2 lines. These 2 lines contain the strings **A** and **B**, respectively. Length of **A** and **B** will not be more than **60**. All these strings contain only lowercase letters (‘a’ -‘z’). No empty strings will appear in the input.

**Output**

For each case, print a line of the form **Case** <x>: <y>, where **x** is the case number and **y** is the length of the longest common palindromic subsequence.