

## 12473 Common Palindrome

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,  $A = \text{"cfcfaafc"}$ ,  $B = \text{"efagfc"}$ . Then the longest palindrome which is a subsequence of both  $A$  and  $B$  is  $\text{"faf"}$ . So the answer is 3.

### Input

First line of the input contains a positive integer  $T$  ( $T \leq 100$ ). 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.

### Sample Input

```
3
cfcfaafc
efagfc
afbcdfca
bcadfcgyfka
palin
drome
```

### Sample Output

```
Case 1: 3
Case 2: 5
Case 3: 0
```