

<b>F</b>	<b>Convert String to Palindrome</b>	Time Limit: <b>1 sec</b>
	Setter: Rajon Bardhan	Memory Limit: <b>512 MB</b>

A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward as forward, such as “madam” or “racecar” or the number, “10801”. Sentence-length palindromes may be written when allowances are made for adjustments to capital letters, punctuation, and word dividers, such as “A man, a plan, a canal, Panama!”, “Was it a car or a cat I saw?” or “No ‘x’ in Nixon”. In this problem, you will be given a word which contains only lower case alphabets. You need to find out a way to make the word palindrome by deleting minimum number of characters from the string. Let, a word of length  $n$  is “ $A_1 A_2 A_3 \dots A_{n-2} A_{n-1} A_n$ ”. If you delete the  $i$ th character from the word then new word will be “ $A_1 A_2 A_3 \dots A_{i-1} A_{i+1} \dots A_{n-2} A_{n-1} A_n$ ”. Here is an example. Let, a word is “abbea”. Now, if you delete the 4th character ‘e’ from the word, you will get the word “abba”, which is a palindrome.

### Input:

The first line is an integer, **T** ( $T \leq 100$ ), which is the number of test cases. This line is followed by  $T$  lines of  $T$  cases. Each case contains a word. The word contains only lower case alphabets with no special characters. The length of the word is less than **1001**.

### Output:

For each case, print the number of case following by the required result.

### Sample I/O:

Sample Input	Sample Output
2 abxa abdba	Case 1: 1 Case 2: 0

**Note:** Look, for 1st case, if x is deleted from the word, then we will get the palindrome “aba”. For 2nd case, the word is already palindromic word, no character is required to delete.