

<b>C</b>	<b>What a prediction!</b>	<b>Time Limit: 1 sec</b>
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In world cup season we see predictions from amazing talented animals to predict winners of certain matches. That's funny, right? However, this matter really bothers our **friend1** and **friend2**. To them it's an insult (Why should animals predict results of human game?). So they have found a way to have fun instead of watching these predictions.

They will try to predict how many goals will be in this tournament. Note that, they will only predict, whether it's possible or not is none of our concern. They will calculate this in a specific method. However, they have matches to watch. So, they have appointed you, an amazing programmer to solve the problem.

You are given two strings **S** and **P**. You have to get the result using these **P** and **S**. Let's say you search in **S** and find **P** starting from index **x**. Then you will have to delete the middle character from **P** and again search in **S** from the next position (**x+1**) with the new string **P<sub>new</sub>**. Finding the middle character is confusing right? Okay, let's say the length of **P** in a certain stage is **N**. If **N** is even, you will delete the **N/2<sup>th</sup>** character. If **N** is odd, delete the **(N/2 + 1)<sup>th</sup>** one. You will not have to perform delete operation when size of the string **P** becomes 1.

Say, we have a text **S = abacdabcd** and a string **P = abacd**. **P** is found in **S** and the starting position is 1. Delete the **3<sup>rd</sup>** character **a** from **P**, so **P<sub>new</sub>** will be **abcd**. We then start our search from position 2 in **S** and **P** is found in **S** at position 6. Now we delete the character **2<sup>nd</sup>** 'b' from **P**, so **P<sub>new</sub>** will be **acd**. Then we start to match from position 7 in **S** but no further matching is found. Therefore our goal prediction result is 2.

## Input

First line contains a number **T**. **T** test cases follow. Each case contains two strings **S** and **P**.

Here,

$1 \leq T \leq 5$ ,

$1 \leq \text{length of } S \leq 10^6$

$1 \leq \text{length of } P \leq 2 \times 10^4$

S, P will contain only lowercase alphabets.

## Output

Print the result in a format of **Case n: m**. Here, **n** is the case number and **m** is the result.

## Sample I/O

Input	Output
2 aaa a abcbabba abcba	Case 1: 3 Case 2: 2