# 1255 – Substring Frequency

A string is a finite sequence of symbols that are chosen from an alphabet. In this problem you are given two non-empty strings **A** and **B**, both contain lower case English alphabets. You have to find the number of times **B** occurs as a substring of **A**.

## Input

Input starts with an integer **T (≤ 5)**, denoting the number of test cases.

Each case starts with two lines. First line contains **A** and second line contains **B**. You can assume than **1 ≤ length(A), length(B) ≤ $10^6$**.

## Output

For each case, print the case number and the number of times **B** occurs as a substring of **A**.

| Sample Input | Output for Sample Input |
|---|---|
| 4<br>axbyczd<br>abc<br>abcabcabcabc<br>abc<br>aabacbaabbaaz<br>aab<br>aaaaaa<br>aa | Case 1: 0<br>Case 2: 4<br>Case 3: 2<br>Case 4: 5 |

## Note

Dataset is huge, use faster I/O methods.