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 axbyczd abc abcabcabcabc abc aabacbaabbaaz aab aaaaaa aa	Case 1: 0 Case 2: 4 Case 3: 2 Case 4: 5

Note

Dataset is huge, use faster I/O methods.