Description

A subsequence of a given sequence is just the given sequence with some elements (possibly none) left out. Formally, given a sequence $X = x_1, x_2, \ldots, x_k$ another sequence $Z = z_1, z_2, \ldots, z_k$ is a subsequence of $X$ if there exists a strictly increasing sequence $< i_1, i_2, \ldots, i_k >$ of indices of $X$ such that for all $j = 1, 2, \ldots, k$, we have $x_{i_j} = z_j$. For example, $Z = bcdb$ is a subsequence of $X = abcbdab$ with corresponding index sequence $< 2, 3, 5, 7 >$. In this problem your job is to write a program that counts the number of occurrences of $Z$ in $X$ as a subsequence such that each has a distinct index sequence.

Input

The first line of the input contains an integer $N$ indicating the number of test cases to follow. The first line of each test case contains a string $X$, composed entirely of lowercase alphabetic characters and having length no greater than 10,000. The second line contains another string $Z$ having length no greater than 100 and also composed of only lowercase alphabetic characters. Be assured that neither $Z$ nor any prefix or suffix of $Z$ will have more than $10^{100}$ distinct occurrences in $X$ as a subsequence.

Output

For each test case in the input output the number of distinct occurrences of $Z$ in $X$ as a subsequence. Output for each input set must be on a separate line.

<table>
<thead>
<tr>
<th>Sample Input</th>
<th>Sample Output</th>
</tr>
</thead>
</table>
| 2
babgbag
gab
rabbit
rabbit | 5
3 |