Problem J. Circular Matching

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	1024 megabytes

Given two strings s and t, both consisting of lowercase letters.

Let $s_{l,r}$ be the substring of s from its l-th character to its r-th character with length $L = r - l + 1$. We say that t appears on the circle of $s_{l,r}$ if and only if there exists a starting position p ($0 \le p < L$) such that for all $0 \le k < |t|$, we have $s_{l,r}[(p + k) \bmod L] = t[k]$. If $L < |t|$, then t is considered not to appear on the circle of $s_{l,r}$.

Count how many distinct pairs (l, r) satisfy that t appears on the circle of $s_{l,r}$.

Input

Each test file contains multiple test cases. The first line contains the number of test cases T ($1 \le T \le 2 \times 10^5$). The description of the test cases follows.

The first line of each test case contains a string s ($1 \le |s| \le 2 \times 10^5$).

The second line contains a string t ($1 \le |t| \le 2 \times 10^5$).

It is guaranteed that all strings consist of lowercase letters.

For each test file, it is guaranteed that the sum of $|s|$ over all test cases does not exceed 2×10^5, and the sum of $|t|$ over all test cases does not exceed 2×10^5.

Output

For each test case, output one integer on a single line, representing the number of pairs (l, r) that satisfy the condition.

Examples

standard input	standard output
3 cabcccabc ccabcc bcdabc abcd aaaxaaaxaaa axaaaxaa	3 3 10
4 aaaaaaaaa a abacab caba baaabaab aabaaab bbabbbabb bbbabbb	45 4 2 3