Strings in the Pocket

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

BaoBao has just found two strings $s = s_1 s_2 \dots s_n$ and $t = t_1 t_2 \dots t_n$ in his left pocket, where s_i indicates the i-th character in string s, and t_i indicates the i-th character in string t.

As BaoBao is bored, he decides to select a substring of s and reverse it. Formally speaking, he can select two integers l and r such that $1 \le l \le r \le n$ and change the string to $s_1 s_2 \dots s_{l-1} s_r s_{r-1} \dots s_{l+1} s_l s_{r+1} \dots s_{n-1} s_n$.

In how many ways can BaoBao change s to t using the above operation exactly once? Let (a, b) be an operation which reverses the substring $s_a s_{a+1} \dots s_b$, and (c, d) be an operation which reverses the substring $s_c s_{c+1} \dots s_d$. These two operations are considered different, if $a \neq c$ or $b \neq d$.

Input

There are multiple test cases. The first line of the input contains an integer T, indicating the number of test cases. For each test case:

The first line contains a string s ($1 \le |s| \le 2 \times 10^6$), while the second line contains another string t ($|t| = |s|$). Both strings are composed of lower-cased English letters.

It's guaranteed that the sum of $|s|$ of all test cases will not exceed 2×10^7.

Output

For each test case output one line containing one integer, indicating the answer.

Example

standard input	standard output
2 abcbcdcbd abcdcbcbd abc abc	3 3

Note

For the first sample test case, BaoBao can do one of the following three operations: (2, 8), (3, 7) or (4, 6).

For the second sample test case, BaoBao can do one of the following three operations: (1, 1), (2, 2) or (3, 3).