Problem I
Simple Regular Expression

Time Limit: 1 second

Memory Limit: 64 megabytes

Mr. Do Le is learning about regular expression. He has just learned about the notation "*" (star). This character can be used for representing any string including an empty string.

Mr. Do Le considers that a string T matches a pattern P if and only if there is a way to replace the stars in P with (possibly empty) sequences of lowercase letters so that the result equals T. For example, the string aadbc matches the pattern a*b*c, as we can obtain the string from the pattern by replacing the first star in the pattern with ad and the second one with the empty string. On the other hand, the string abcbcb does not match this pattern.

Given a non-empty string S, Mr. Do Le wants to know the number of cyclic shifts of S that match the given pattern P.

Note: The cyclic shift is defined as the string S can be split into two non-empty parts $X + Y$ and in one operation we can transform S to $Y + X$ from $X + Y$.

Input

The first line of input contains the pattern P (no more than 100 characters).

The second line contains the string S (no more than 10^5 characters).

Output

The output consists of a single integer, the number of cyclic shifts of S that match the pattern P.

Sample Input	Sample Output
aaaa aaaa	4
a*a aaaaaa	6
*a*b*c* abacabadabacaba	15