String rotations P62097_en

Given a string s of size n, we define the i-th rotation of s (for $0 \leq i < n$) as

$$s_i s_{i+1} \dots s_{n-1} s_0 \dots s_{i-2} s_{i-1} \ .$$

Given two strings s and t, compute how many i-th rotations of s are equal to t.

For instance, for $s =$ "`abbabb`" and $t =$ "`babbab`" the answer is 2, corresponding to $i = 2$ and $i = 5$.

Input

Input consists of several cases, each one with two strings s and t with only lowercase letters. Assume $1 \leq |s| = |t| \leq 10^5$. Every letter appears the same number of times in s and in t.

Output

For every case, print the number of i-th rotations of s that are equal to t.

Sample input 1

```
abbabb babbab
abc acb
abba bbaa
zzzzz zzzzz
```

Sample output 1

```
2
0
1
5
```

Problem information

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