Given a string and a pattern, your task is to count the number of positions where the pattern occurs in the string.

Input

The first input line has a string of length n, and the second input line has a pattern of length m. Both of them consist of characters a–z.

Output

Print one integer: the number of occurrences.

Constraints

- $1 \le n, m \le 10^6$

Example

Input:
```
saippuakauppias
pp
```

Output:
```
2
```