Problem A. String Matching

Time limit 1000 ms **Mem limit** 524288 kB

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

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

Example

Input	Output
saippuakauppias pp	2