

A. String Matching

time limit per test: 1 second
memory limit per test: 256 megabytes

Given two strings s and t , determine the number of times t occurs in s .

Input

The first line contains s , the second line contains t . The lines consist only of capital Latin letters, and $1 \leq |s|, |t| \leq 300\,000$.

Output

Output the number of times t occurs in s .

Examples

input	Copy
BABABABABABABAB ABABAB	
output	Copy
6	

input	Copy
ACCEPTED WRONGANSWER	
output	Copy
0	

input	Copy
ABBBBA BBB	
output	Copy
2	

UIUC CS 491 Spring 2025

Private

Participant



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→ Group Contests

- Line Sweep - Homework (Extra Credit)
- Convex Hull - Preclass
- Number Theory I - Homework
- Line Sweep - Preclass
- Number Theory II - Homework
- Combinatorics - Homework
- Geometry - Preclass
- Geometry - Homework
- Convex Hull - Homework (Extra Credit)
- Rabin Karp - Homework
- Number Theory II - Preclass
- Combinatorics - Preclass
- DP TSP - Homework
- KMP - Homework
- DP Tree - Homework
- Number Theory I - Preclass
- KMP - Preclass
- DP Palindromes - Homework
- Rabin Karp - Preclass
- DP Edit Distance - Homework
- DP Knapsack - Homework
- DP TSP - Preclass
- DP Longest Increasing Subsequence - Homework
- DP Intro - Homework
- DP Tree - Preclass
- Greedy - Homework
- Fenwick Tree - Homework