

REMOVING CHARACTERS

Given a string S and a pattern P . Delete some characters in the text to form the maximum consecutive pattern strings. What is the maximum number of pattern strings can be created?

Input

The first line is the string S ($0 \leq |S| \leq 10^5$)

The second line is the string P ($0 \leq |P| \leq 10^5$).

Both strings contain only lowercase characters.

Output

A single number which is the maximum number of patterns can be created

Sample

Input	Output
abcdbacdb	2
acb	