

A3 – Alphabet

A string of lowercase letters is called *alphabetical* if deleting zero or more of its letters can result in the *alphabet string* “`abcdefghijklmnopqrstuvwxyz`”. Given a string s , determine the minimum number of letters to insert anywhere in the string to make it alphabetical.

Input

The input consists of a single line containing the string s ($1 \leq |s| \leq 50$). It is guaranteed that s consists of lowercase ASCII letters ‘a’ to ‘z’ only.

Output

Print, on a single line, a single integer indicating the minimum number of letters that must be inserted in order to make the string s alphabetical

Input and output samples

Input:	Output:
xyzabcdefghijklmnopqrstuvw	3
Input:	Output:
aiemckgobjfndlhp	20