ICPC PACNW 2016 A - Alphabet

Time limit: 0.6s Memory limit: 256M

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 $(1 \le |s| \le 50)$.

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.

Sample Input 1

xyzabcdefghijklmnopqrstuvw

Sample Output 1

3

Sample Input 2

aiemckgobjfndlhp

Sample Output 2