

Find Unchanged Position

In this problem you have to take a string S as a input , then you have to sort the string lexicographically that's mean you have to sort the string like (A..B..C....Z) in this pattern , then you have to find how many letters in string S remain same position After sorting. String S can contain only uppercase letters and can not contain any space .

Input

Input starts with several test case . Each line contains a string S ($1 \leq \text{length of S} \leq 50$). Input is terminated by a line which contains '#'

Output

For each test case print a integer number that denote how many letters in string S remain same position After sorting .

Example

Input:

HEIST

MAN

#

Output:

3

1

*First input "HEIST" after sorting "EHIST" remaining same position letters: I , S , T so the answer is 3 .