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The Virtual Learning Environment for Computer Programming

Increasing subsequences

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Write a program that computes how many strictly increasing subsequences with at least two letters are contained in a given word. For instance, the word arrow (we have written the second r in bold italics to distinguish it) contains the increasing subsequences arw, ar, arw, ar, aow, ao, aw, rw, rw and ow.

Input

Input consists of several cases, each with a word made up of between 1 and 100 lowercase letters.

Output

For every case, print the number of strictly increasing subsequences with at least two letters contained in the word. That number will always be less than 10^9 .

Sample input	Sample output
arroz	10
petate	6
az	1
za	0
t	0
aaaa	0
abcdefghij	1013
abcdefghijabcdefghijabcdefghij	66263
aaaaaaaaabbbbbbbbbbbyyyyyyyyzzzzzzzzzzz	14600

Problem information

Author: Salvador Roura Translator: Carlos Molina

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