

1774 - Capitalization

Description

The Caps Lock is a computer keyboard key which enable (and disable) an input mode in which typed letters are capital by default. If this key is pressed by accident, then you can write words of undesirable ways.

Then, let's consider that a word has not been typed with the Caps Lock key accidentally switched on, if:

- the word only contains lowercase letters.
- or all letters except for the first one are lowercase.

In all other cases we should automatically change the case of all letters. For example, the case of the letters that form words "gOOD" and "SMS" should be changed.

Write a program that applies the rule mentioned above. If the word has not been typed with the Caps Lock key accidentally switched on, the rule cannot be applied, and the program should leave the word unchanged.

Input specification

The first line of the input data contains a word consisting of uppercase and lowercase Latin letters, with length between 1 to 100 characters, inclusive.

Output specification

The result of the given word, after the program processing.

Sample input

hELLO

Sample output

Hello

Hint(s)