Sorting is easy

Do you think sorting is easy?

try your luck
in brainfuck

For those who don't know that brainfuck is a programming language: Take a look at the converter to C. It will ignore every unknown command, therefore submitting a program in any other language won't necessarily lead to compile error, but certainly not to Accepted.

Input

The input consists of a line of up to 1000 uppercase letters, terminated with a '\n' character (ASCII value 10).

Output

The output should contain a line consisting of the same characters as the input line, but in non-descending order.

Example

Input:
BRAINFUCK

Output:
ABCFIKNRU