

Digits Battle

Starting from the left side of an integer, adjacent digits pair up in "battle" and the larger digit wins. If two digits are the same, they both lose. A lone digit automatically wins.

Your task is to write a program that returns the victorious digits.

There are no winners in a battle with equal digits (neither should be printed).
If the length of the number is odd, the lone digit should be printed at the end of the number.

Input

The first line of input contains the number N.

Output

The first line of output contains the victorious digits.

Sample input

Sample output

578921445	7925
111	1