

Swapping min and max

You are given the sequence of integers in the input. Swap all min and max values in that sequence.

Input

In the first line, you are given one number N , where $1 \leq N \leq 100$. In the following one line you are given N integers of value between -1000 and 1000.

Output

Rewrite the sequence from the input but replace each minimum value with the maximum one, and vice versa.

Example 1

Input:

5
0 8 5 8 0

Output:

8 0 5 0 8

Example 2

Input:

6
-10 5 2 10 -10 3

Output:

10 5 2 -10 10 3

Remark

There are four datasets, i.e., input & output. Two of them are visible for you to compare the model and your output, and two of them are hidden.