Turbo Sort Problem Code: **TSORT**

Given the list of numbers, you are to sort them in non decreasing order.

Input

t – the number of numbers in list, then *t* lines follow [$t <= 10^6$].
Each line contains one integer: *N* [$0 <= N <= 10^6$]

Output

Output given numbers in non decreasing order.

Example
Input:

5

5

3

6

7

1

Output:

1

3

5

6

7