Sort an array of integers in non-decreasing order.

The first line of the input contains an integer N ( $1 \le N \le 100$ ), the second line contains N integers, modulo not exceeding  $2 \cdot 10^9$ .

Output the given numbers in non-decreasing order.

## Sample input:

10

 $1\; 8\; 2\; 1\; 4\; 7\; 3\; 2\; 3\; 6$ 

## Sample output:

1 1 2 2 3 3 4 6 7 8