

Sort Numbers in Ascending Order

Your task is to write a method that takes an array of integers and returns a new array, sorted in ascending order (smallest to biggest).

1. Sort integer array in ascending order.
2. If the function's argument is null, an empty array, or undefined; return an empty array.
3. Return a new array of sorted numbers.

Notes

Test input can be positive or negative.

Input

The first line of input contains the array's length.

The second line of input contains the array's elements.

Output

The first line contains the array sorted in ascending order.

Sample input

Sample output

4 12 3 1 -9	[-9, 1, 3, 12]
0	[]
7 -2 4 1 3 12 -3 5	[-3, -2, 1, 3, 4, 5, 12]