

I. Array sorting

time limit per test: 2 seconds
memory limit per test: 64 megabytes
input: standard input
output: standard output

Sorting arrays is traditionally associated with high-level languages. How hard can it be in Befunge? Sort the given array in non-descending order.

Input

The first line of input contains an integer n ($1 \leq n \leq 100$) — the size of the array. The following n lines contain the elements of the array, one per line. Each element of the array is an integer between 1 and 60, inclusive. The array might contain duplicate elements.

Output

Output space-separated elements of the sorted array.

Examples

input
5 7 1 9 7 3
output
1 3 7 7 9

input
10 60 1 60 1 60 1 60 1 60 1 60 1
output
1 1 1 1 1 60 60 60 60 60