

Number Sorting Problem

Time Limit: 2.00 s

Memory Limit: 256 MB

Problem Statement

You are given a sequence of integers. Your task is to sort these numbers in ascending order and output them.

Input

- The first line contains an integer n ($1 \leq n \leq 10^5$), the number of integers.
 - The second line contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$).
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Output

- Output the numbers in ascending order, separated by spaces.
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Constraints

- $1 \leq n \leq 10^5$
 - $1 \leq a_i \leq 10^9$
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Example

Input

```
8
1 2 4 2 1 3 78 54
```

Output

```
1 1 2 2 3 4 54 78
```