

B. Sort

time limit per test: 1 second
 memory limit per test: 256 megabytes
 input: standard input
 output: standard output

Given an integer array a of length $1 \leq n \leq 10^5$, implement an efficient algorithm that sorts it.

Input

The first line of the input contains an integer n , the length of the array. The next line contains n integers a_1, a_2, \dots, a_n , elements of array a . It is guaranteed that each a_i satisfies $0 \leq a_i \leq 100000$.

Output

Print one line containing n numbers representing elements of array a sorted in non-decreasing order.

Example

input

```
5
3 1 4 1 5
```

output

```
1 1 3 4 5
```

EPFL Algorithms Fall 2021

Private

Participant



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Contest 1

Contest is running

4 weeks

Contestant



→ Submit?

Language:

Choose file: No file chosen

→ Last submissions

Submission	Time	Verdict
144785146	Feb/01/2022 01:45	Accepted
144784972	Feb/01/2022 01:37	Accepted
144784953	Feb/01/2022 01:36	Compilation error
144603314	Jan/31/2022 02:12	Accepted
144603216	Jan/31/2022 02:06	Accepted
144603177	Jan/31/2022 02:04	Wrong answer on test 5
144603016	Jan/31/2022 01:55	Accepted
144602058	Jan/31/2022 01:02	Time limit exceeded on test 4
144601987	Jan/31/2022 00:58	Time limit exceeded on test 4
144601888	Jan/31/2022 00:54	Time limit exceeded on test 4

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