

Problem Statement

You are given N integers. Sort the N integers and print the sorted order.

Store the N integers in a vector. Vectors are sequence containers representing arrays that can change in size.

- *Declaration:*

```
vector<int>v; (creates an empty vector of integers)
```

- *Size:*

```
int size=v.size();
```

- *Pushing an integer into a vector:*

```
v.push_back(x); (where x is an integer. The size increases by 1 after this.)
```

- *Popping the last element from the vector:*

```
v.pop_back(); (After this the size decreases by 1)
```

- *Sorting a vector:*

```
sort(v.begin(),v.end()); (Will sort all the elements in the vector)
```

To know more about vectors, [Click Here](#)

Input Format

The first line of the input contains N where N is the number of integers. The next line contains N integers.

Constraints

$$1 \leq N \leq 10^5$$

$$1 \leq V_i \leq 10^9, \text{ where } V_i \text{ is the } i^{th} \text{ integer in the vector.}$$

Output Format

Print the integers in the sorted order one by one in a single line followed by a space.

Sample Input

```
5
1 6 10 8 4
```

Sample Output

```
1 4 6 8 10
```

