Vector-Sort

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

$1 <= N <= 10^5$

$1 <= V_i <= 10^9$, where V_i is the ith 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
```