

<https://course.acciojob.com/idle?question=04c51a0a-2136-40da-8738-c391d6a9ef8f>

- **EASY**

- **Max Score: 30 Points**

-

Bubble Sort

Write a program to sort an array (`arr[]`) of integers in descending (decreasing) order using Bubble sort algorithm. First take input of size of the array i.e. N , followed by N numbers which represent the array elements.

Note: Use of inbuilt sort function is not permitted.

Time complexity: There are N elements in the array and for every element we make N iterations, hence $N*N$ iterations which gives us a Time complexity of $O(N^2)$ in the worst case.

Space Complexity: Since this algorithm works without the use of any additional storage space apart from the input, we can say that the Space Complexity will be $O(1)$

Input Format

First line contains integer N denoting the size of array `arr[]`

Second line contains N array integers each separated by a space denoting elements of `arr[]`

Output Format

Output N integers of the sorted array separated by a space in a single line

Example 1

Input

5
1 4 3 7 2

Output

7 4 3 2 1

Explanation

7>4>3>2>1

Example 2

Input

6
1 2 3 4 5 6

Output

6 5 4 3 2 1

Explanation

6>5>4>3>2>1

Constraints

$1 \leq n \leq 1000$

$1 \leq \text{arr}[i] \leq 1000$

Topic Tags

- **Loops**
- **Sorting**

My code

[illegible]

```
        }  
    for(int i=0;i<n;i++)  
        System.out.print(arr[i]+" ");  
}
```