

<https://course.acciojob.com/idle?question=0049558a-836e-4bef-b820-7e8810b345a5>

//problem

- **EASY**
- **Max Score: 30 Points**

Sorting Problem 3

Given an integer array `arr[]` in unsorted order. Using Bubble Sort Technique, return an array of the squares of each number sorted in non-decreasing order.

Explanation: After squaring, the array becomes `[16,1,0,9,100]`. After sorting, it becomes `[0,1,9,16,100]`.

Input Format

`n (size of the array) arr[0] arr[1] arr[2] ... arr[n-1]`

Output Format

`arr[0] arr[1] arr[2] ... arr[n-1]`

Example 1

Input

5

-4 -1 0 3 10

Output

0 1 9 16 100

Topic Tags

- **Sorting**

My code

// in java

```
import java.util.*;
```

```
import java.lang.*;
```

```
import java.io.*;
```

```
public class Main
```

```
{
```

```
    public static void main (String[] args) throws  
    java.lang.Exception
```

```
    {
```

```
        //your code here
```

```
        Scanner s=new Scanner(System.in);
```

```
        int n=s.nextInt();
```

```
        int arr[]=new int[n];
```

```
        for(int i=0;i<n;i++)
```

```
        {
```

```

        int num=s.nextInt();
        arr[i]=num*num;
    }
    for(int i=n-1;i>0;i--)
    {
        for(int j=0;j<i;j++)
        {
            if(arr[j]>arr[j+1])
            {
                int t=arr[j];
                arr[j]=arr[j+1];
                arr[j+1]=t;
            }
        }
    }
    for(int i=0;i<n;i++)
    System.out.print(arr[i]+" ");
}
}

```