

<https://course.acciojob.com/idle?question=47a05a58-8c95-4ace-a7fc-bca89a56fb34>

• EASY

• Max Score: 30 Points

•

Sorting Problem 1

Given is an unsorted array of size n . Use the selection sort algorithm to sort the given unsorted array.

Input Format

First line contains n , size of the array.

Second line contains n space separated unsorted array elements.

Output Format

Line containing n space separated sorted elements.

Example 1

Input

```
5
4 1 3 9 7
```

Output

```
1 3 4 7 9
```

Explanation

Selection sort would move smaller element 1 3 7 forward to give the sorted array.

Example 2

Input

```
3
1 7 5
```

Output

```
1 5 7
```

Explanation

Selection sort would move 5 in front to give 1 5 7 as the sorted array.

Constraints

$1 \leq n \leq 10^3$

$1 \leq \text{arr}[i] \leq 10^3$

Topic Tags

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

```