```
/*import java.util.Arrays;
public class rev {
	public static void main(String[] args)
	{
		int[] array1 = {1, 2, 5, 5, 8, 9, 7, 10};
		int[] array2 = {1, 0, 6, 15, 6, 4, 7, 0};

		System.out.println("Array1 : "+Arrays.toString(array1));
		System.out.println("Array2 : "+Arrays.toString(array2));


		for (int i = 0; i < array1.length; i++)
		{
			for (int j = 0; j < array2.length; j++)
			{
				if(array1[i] == (array2[j]))
				{

					System.out.println("Common element is : "+(array1[i]));
				}
			}
		}

	}
}*/
////////////////////////////////////////////////////////////////////////
    static void print2largest(int arr[],
                              int arr_size)
	{
		int i, first, second;
		if (arr_size < 2)
		{
			System.out.printf(" Invalid Input ");
			return;
		}
		Arrays.sort(arr);
		for (i = arr_size - 2; i >= 0; i--)
		{
			if (arr[i] != arr[arr_size - 1])
			{
				System.out.printf("The second largest " + "element is %d\n", arr[i]);
				return;
			}
		}

		System.out.printf("There is no second " + "largest element\n");
	}

	public static void main(String[] args)
	{
		int arr[] = {12, 35, 1, 10, 34, 1};
		int n = arr.length;
		print2largest(arr, n);
	}
}
////////////////////////////////////////////////////////////////////////
```

```
import java.util.Scanner;
public class rev {
	public static void main(String args[]){
	int [] arr = new int [] {1, 2, 3, 4, 5};
	int n = 3;
		System.out.println("Original array: ");
		for (int i = 0; i < arr.length; i++) {
		System.out.print(arr[i] + " ");
	}
		for(int i = 0; i < n; i++){
		int j, last;
		last = arr[arr.length-1];
		for(j = arr.length-1; j > 0; j--){
			arr[j] = arr[j-1];
		}
		arr[0] = last;
	}
		System.out.println();

		System.out.println("Array after right rotation: ");
		for(int i = 0; i< arr.length; i++){
		System.out.print(arr[i] + " ");
	}
}
}
//////////////////////////////////////////////////////////////////////
import java.util.Arrays;
public class rev{
	public static void main(String[] args) {
			int[] array_nums = {5, 7, 2, 4, 9};
			System.out.println("Original Array: "+Arrays.toString(array_nums));
			int max = array_nums[0];
			int min = array_nums[0];
			float sum = array_nums[0];
			for(int i = 1; i < array_nums.length; i++)
			{
				sum    += array_nums[i];
				if(array_nums[i] > max)
					max = array_nums[i];
				else if(array_nums[i] < min)
					min = array_nums[i];
			}
			float x = ((sum-max-min) / (array_nums.length - 2));
			System.out.printf("Compute the average value of an array of integers except
the largest and smallest values: %.2f",x);
			System.out.print("\n");
		}
	}
//////////////////////////////////////////////////////////////////////////////
import java.util.Arrays;
public class rev{
	public static void main(String[] args) {
		int[] nums = {-4, 8, 6, -5, 6, -2, 1, 2, 3, -11};
		System.out.println("Original Array: "+Arrays.toString(nums));
		sort_nums(nums);
		System.out.println("New Array: "+Arrays.toString(nums));
```

```
	}
	public static void sort_nums(int[] nums){
		int pos_num = 0;
		int neg_num = 0;
		int i,j;
		int max = Integer.MIN_VALUE;
		for(i=0; i<nums.length; i++){
			if(nums[i]<0) neg_num++;
			else pos_num++;
			if(nums[i]>max) max = nums[i];
		}
		max++;
		if(neg_num==0 || pos_num == 0) return;
		i=0;
		j=1;
		while(true){
			while(i<=neg_num && nums[i]<0) i++;
			while(j<nums.length && nums[j]>=0) j++;
			if(i>neg_num || j>=nums.length) break;
			nums[i]+= max*(i+1);
			swap_nums(nums,i,j);
		}

		i = nums.length-1;
		while(i>=neg_num){
			int div = nums[i]/max;
			if(div == 0) i--;
			else{
				nums[i]%=max;
				swap_nums(nums,i,neg_num+div-2);
			}
		}

	}
	private static void swap_nums(int[] nums, int i , int j){
		int t = nums[i];
		nums[i] = nums[j];
		nums[j] =t;

	}}
//////////////////////////////////////////////////////////////////////
import java.util.Arrays;
public class rev{
	public static void main(String[] args) {
		int A[] = { 1, 6, 4, 6, 4, 8, 2, 4, 1, 1 };

		int max = Integer.MIN_VALUE;
		for (int i = 0; i < A.length; i++) {
			if (A[i] > max)
				max = A[i];
		}

		int B[] = new int[max + 1];
		for (int i = 0; i < A.length; i++) {
			B[A[i]]++;
		}
```

```
            for (int i = 0; i <= max; i++) {
                if (B[i] > 1)
                    System.out.println(i + "-" + B[i]);
            }
        }
}
////////////////////////////////////////////////////////////////////////
import java.util.Arrays;
public class rev{
        public static void main(String[] args) {
            int arr[] = { 1, 2, 3, 4, 5, 6 };
            int even = 1, odd = 1;

            for (int i = 0; i < arr.length; i++) {
                if (i % 2 == 0)
                    even += arr[i];
                else
                    odd += arr[i];
            }

            System.out.println("odd index positions sum: " + odd);
            System.out.println("even index positions sum: " + even);
        }

            }
////////////////////////////////////////////////////////////////////////

import java.util.*;
import java.lang.*;
import java.io.*;

class MergeTwoSorted
{
        public static void mergeArrays(int[] arr1, int[] arr2, int n1,
                                                    int n2, int[] arr3)
        {
            int i = 0, j = 0, k = 0;
            while (i<n1 && j <n2)
            {
                if (arr1[i] < arr2[j])
                    arr3[k++] = arr1[i++];
                else
                    arr3[k++] = arr2[j++];
            }
            while (i < n1)
                arr3[k++] = arr1[i++];
            while (j < n2)
                arr3[k++] = arr2[j++];
        }

        public static void main (String[] args)
        {
            int[] arr1 = {1, 3, 5, 7};
            int n1 = arr1.length;

            int[] arr2 = {2, 4, 6, 8};
```

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        int n2 = arr2.length;

        int[] arr3 = new int[n1+n2];

        mergeArrays(arr1, arr2, n1, n2, arr3);

        System.out.println("Array after merging");
        for (int i=0; i < n1+n2; i++)
            System.out.print(arr3[i] + " ");
    }}
/////////////////////////////////////////////////////
class SelectionSort
{
    void sort(int arr[])
    {
        int n = arr.length;
        for (int i = 0; i < n-1; i++)
        {
            int min_idx = i;
            for (int j = i+1; j < n; j++)
                if (arr[j] < arr[min_idx])
                    min_idx = j;
            int temp = arr[min_idx];
            arr[min_idx] = arr[i];
            arr[i] = temp;
        }
    }
    void printArray(int arr[])
    {
        int n = arr.length;
        for (int i=0; i<n; ++i)
            System.out.print(arr[i]+" ");
        System.out.println();
    }
    public static void main(String args[])
    {
        SelectionSort ob = new SelectionSort();
        int arr[] = {10,20,30,40};
        ob.sort(arr);
        System.out.println("Sorted array");
        ob.printArray(arr);
    }
}
```