1.Write a JAVAprogram to find second largest element in an array.

```java
import java.util.Scanner;
public class Second{
  public static void main(String args[]){
    Scanner sc=new Scanner(System.in);
    int t, size;
    int arr[] = {1, 28, 38, 93, 46, 97};
    size = arr.length;
    for(int i = 0; i<size; i++ ){
      for(int j = i+1; j<size; j++){
        if(arr[i]>arr[j]){
        t = arr[i];
        arr[i] = arr[j];
        arr[j] = t;
        }
      }
    }
System.out.println("2nd Largest Number: "+arr[size-2]);
}
  }
```

2.Write a JAVAprogram to count total number of even and odd elements in an array.

```java
import java.util.*;
 class EvenOdd{
public static void main(String args[]){
int a[]={1,2,5,6,3,2};
System.out.println("Odd Numbers:");
for(int i=0;i<a.length;i++){
if(a[i]%2!=0){
System.out.println(a[i]);
}
}
System.out.println("Even Numbers:");
for(int i=0;i<a.length;i++){
if(a[i]%2==0){
System.out.println(a[i]);
}
}
}
}
```

3.Write a JAVAprogram to count total number of negative elements in an array.

```java
public class Negative{
public static void main(String[] args) {
int i = 0, count = 0;
int[] count_NegArr = {-40, 15, -4, 11, -8, -13, 22, 16, -11, -99, 55, 18, -60};
  while(i < count_NegArr.length)
    {
```

```java
        if(count_NegArr[i] < 0) {
            count++;
        }
          i++;
        }
          System.out.println("The Total Number of Negative Array Items = " + count);
        }
}
```

4. Write a JAVAprogram to copy all elements from an array to another array

```java
public class CopyArray {
    public static void main(String[] args) {
        int arr1[] = new int [] {10, 20, 30, 40, 50};
        int arr2[] = new int[arr1.length];
        for (int i = 0; i < arr1.length; i++) {
            arr2[i] = arr1[i];
        }
        System.out.println("Elements of original array: ");
        for (int i = 0; i < arr1.length; i++) {
            System.out.print(arr1[i] + " ");
        }
        System.out.println();
        System.out.println("Elements of new array: ");
        for (int i = 0; i < arr2.length; i++) {
        System.out.print(arr2[i] + " ");
        }
    }
}
```

5.Write a JAVAprogram to delete an element from an array at specified position

```java
import java.util.Scanner;
public class Deletion
{
    public static void main(String[] args)
    {
        int[] a = new int[50];
        Scanner sc = new Scanner(System.in);
        System.out.println("enter the size of an array and elements");
        int size = sc.nextInt();
        for(int i=0; i<size; i++)
        {
            a[i] = sc.nextInt();
        }
        System.out.println("ARRAY ELEMENTS BEFORE DELETION");
        for(int i=0; i<size; i++)
        {
            System.out.println(a[i] + " ");
        }
        System.out.println("Enter the position where the element should be
inserted");
```

```java
        int pos = sc.nextInt();
        for(int i=pos; i<size; i++)
        {
            a[i] = a[i+1];
        }
        size--;
        System.out.println("ARRAY ELEMENTS AFTER DELETION");
        for(int i=0;i<size;i++)
        {
            System.out.println(a[i] + " ");
        }
    }
}
```

6. Write a JAVAprogram to count frequency of each element in an array.

```java
public class Frequency{
  public static void main(String[] args) {

    int [] arr = new int [] {2, 2, 3, 4, 5, 5, 5, 3, 2, 4};

    int [] frequency = new int [arr.length];
    int counted = -1;
    for(int i = 0; i < arr.length; i++){
      int count = 1;
      for(int j = i+1; j < arr.length; j++){
        if(arr[i] == arr[j]){
          count++;


          frequency[j] = counted;
        }
      }
      if(frequency[i] != counted)
        frequency[i] = count;
    }


    for(int i = 0; i < frequency.length; i++){
      if(frequency[i] != counted)
        System.out.println("Element: "+arr[i] + " Frequency: " + frequency[i]);
    }
  }
}
```

7.Write a JAVAprogram to print all unique elements in the array.
```java
import java.util.Scanner;
import java. util. Arrays;
```

```java
public class UniqueElement {
public static void main(String[] args) {
Scanner sc = new Scanner(System.in);

    System.out.println("Enter the size of the array 1:");
    int size1 = sc.nextInt();

    int[] arr = new int[size1];
    System.out.println("Enter the elements of the array1:");

    for(int i=0; i<arr.length; i++) {
       arr[i] = sc.nextInt();
    }

 Arrays.sort(arr);
 for (int i=0;i<arr.length;i++)
 System.out.println(arr[i]);
 int i=0;
 System.out.println("Unique Elements in array:");
 while(i<arr.length)
 {
    if(arr[i]!=arr[i+1])
    {
        System.out.println(arr[i]);
    }
    i=i+2;
 }
}
}
```

8.Write a JAVAprogram to count total number of duplicate elements in an array.
```java
public class Duplicate {
    public static void main(String[] args) {


        int [] arr = new int [] {1, 2, 3, 4, 2, 7, 8, 8, 3};

        System.out.println("Duplicate elements in given array: ");

        for(int i = 0; i < arr.length; i++) {
            for(int j = i + 1; j < arr.length; j++) {
                if(arr[i] == arr[j])
                    System.out.println(arr[j]);
            }
        }
    }
}
```

9. Write a JAVAprogram to find maximum and minimum element in an array.
class MinMax

```java
{
  public static void main(String[] args)
    {
        int[] nums = { 5, 7, 2, 4, 9, 6 };


        findMinAndMax(nums);
    }
public static void findMinAndMax(int[] nums)
    {
      int max = nums[0];
      int min = nums[0];
      for (int i = 1; i < nums.length; i++)
        {
            if (nums[i] > max) {
            max = nums[i];
            }
             else if (nums[i] < min) {
             min = nums[i];
            }
        }

        System.out.println("The minimum array element is " + min);
        System.out.println("The maximum array element is " + max);
    }


}
```