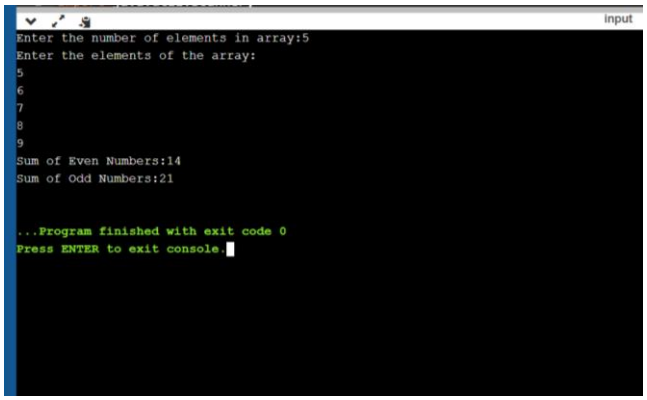
WEEK3---LAB 1 PROGRAMS

EXTRA PROGRAMS

PROGRAM—1

```
import java.util.Scanner;

public class Main

{

   public static void main(String[] args)

   {

      int n, sumE = 0, sumO = 0;

      Scanner s = new Scanner(System.in);

      System.out.print("Enter the number of elements in array:");

      n = s.nextInt();

      int[] a = new int[n];

      System.out.println("Enter the elements of the array:");

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

      {

         a[i] = s.nextInt();

      }

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

      {

         if(a[i] % 2 == 0)

         {

            sumE = sumE + a[i];

         }

         else

         {

            sumO = sumO + a[i];

         }
```

```
        }
        System.out.println("Sum of Even Numbers:"+sumE);
        System.out.println("Sum of Odd Numbers:"+sumO);
    }
}
```

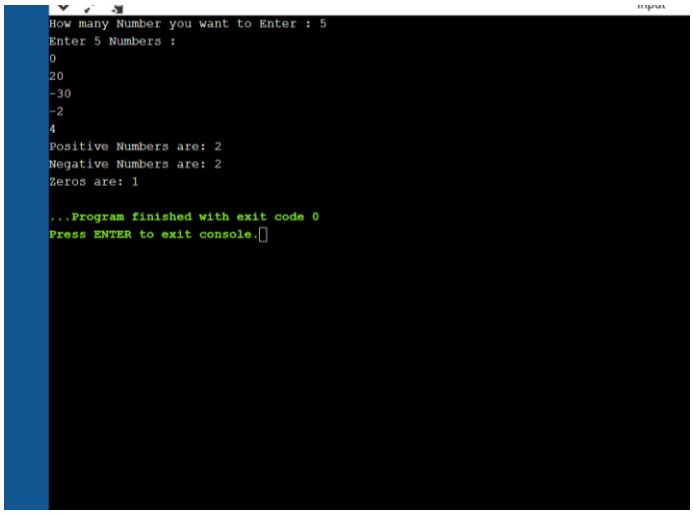


PROGRAM—2

```
import java.util.Scanner;


public class Main
{
    public static void main(String args[])
    {
            // intialize and declaring the objects.
        int n,positive=0, negative=0, zero=0, i;
        int arr[] = new int[50];
        Scanner scan = new Scanner(System.in);


        // enter number you have to enter.
        System.out.print("How many Number you want to Enter : ");
        n = scan.nextInt();
```

```
    // enter the numbers.
    System.out.println("Enter " +n+ " Numbers : ");


    // this is to calculate the type of the number.
    for(i=0; i<n; i++)
    {
        arr[i] = scan.nextInt();
    }
    for(i=0; i<n; i++)
    {
        if(arr[i] < 0)
        {
            negative++;
        }
        else if(arr[i] == 0)
        {
            zero++;
        }
        else
        {
            positive++;
        }
    }
                        // print all +ve,-ve and zero number.
    System.out.print("Positive Numbers are: " + positive );
    System.out.print("\nNegative Numbers are: " + negative );
    System.out.print("\nZeros are: " + zero );
}
```

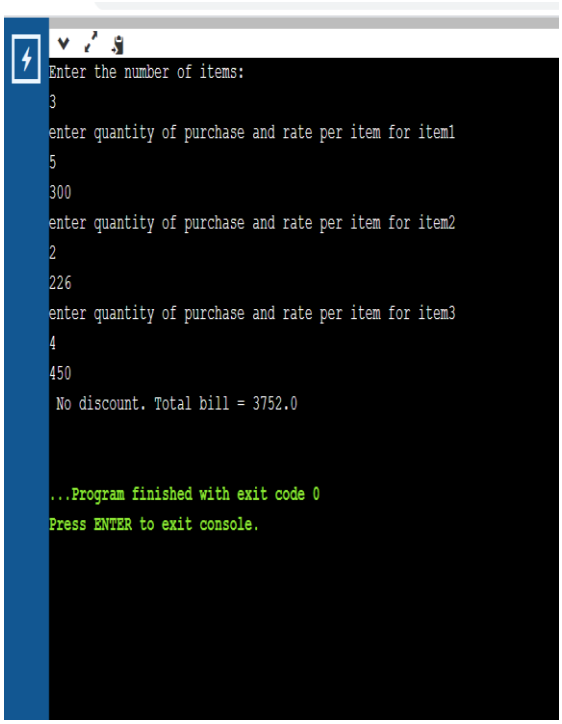
}



PROGRAM---3

```
import java.util.Scanner;

public class Main {

   public static void main(String[] args){

      Scanner sc = new Scanner(System.in);




      System.out.println("Enter the number of items:");

      int n = sc.nextInt();

      double indTot, tot = 0;

      double[] rpi = new double[n];

      int[] quant = new int[n];

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

         System.out.println("enter quantity of purchase and rate per item for item"+(i+1));

         int q = sc.nextInt();

         double r = sc.nextDouble();

         quant[i] = q;
```

```
            rpi[i] = r;
        }
        for(int i = 0; i<n; i++){
            indTot = quant[i] * rpi[i] ;
            tot += indTot;
        }
        if (tot >= 10000) {
            System.out.println("Discount = 5%. Total bill = " + tot + " Discounted bill = " + (tot - tot * 0.05));
        }


        else if (tot >= 7500) {
            System.out.println("Discount = 3%. Total bill = " + tot + " Discounted bill = " + (tot - tot * 0.03));
        }
         else if (tot >= 5000) {
            System.out.println("Discount = 2%. Total bill = " + tot + " Discounted bill = " + (tot - tot * 0.02));
        }
        else{
            System.out.println(" No discount. Total bill = " + tot );
        }


    }
}
```



PROGRAM---4

```
import java.util.Scanner;


public class Main {

   public static void main(String[] args){

   int n, j = 0, k = 0, sum = 0, avg, max , min;

   Scanner s = new Scanner(System.in);

   System.out.print("Enter the number of elements in array:");

   n=s.nextInt();

   int[] a = new int[n];

   int[] b = new int[n];

   int[] c = new int[n];

   System.out.println("Enter the elements of the array:");

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

      a[i] = s.nextInt();

   }
```

```
    for(int i = 0;i<n;i++){
        if (a[i] % 2 == 0) {
            c[j] = a[i];
            sum += a[i];
            j++;
        } else {
            b[k] = a[i];
            k++;
        }
    }
    //avg = sum / j;
    max = c[0];
    min = c[0];
    for(int i = 0; i<j;i++){
        if (c[i] > max){
            max = c[i];
        }
        if (c[i] < min){
            min = c[i];
        }
    }
    System.out.println("For the even array sum is "+sum+" average is "+(sum/j)+" maximum is "+max+" minimum is "+min);

}
}
```