

### 1)PROGRAM-1

```
import java.util.Scanner;

class prog1{

    public static void main(String args[]) {

        float arr[]=new float[50];

        int n;

        float sumo=0,sume=0;

        Scanner ob = new Scanner(System.in);

        System.out.println("Enter n");

        n=ob.nextInt();

        System.out.println("Enter numbers");

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

            arr[i]=ob.nextFloat();

            if(i%2==0) {sume=sume+arr[i];}

            else {sumo=sumo+arr[i];}

        }

        System.out.println("Sum of terms of even and odd indices are respectively "+sume+"

and "+sumo);

    }

}
```

### 2)PROGRAM-2

```
import java.util.Scanner;

class prog2 {

    public static void main(String args[]) {

        float arr[]=new float[50];

        int n,p=0,ne=0,z=0;

        Scanner ob=new Scanner(System.in);

        System.out.println("Enter n");

        n=ob.nextInt();
```

```

System.out.println("Enter numbers");
for(int i=0;i<n;i++) {
    arr[i]=ob.nextFloat();
    if(arr[i]<0) {ne++;}
    if(arr[i]>0) {p++;}
    if(arr[i]==0) {z++;}
}
System.out.println("Number of positive,negative and zeroes in this array is: "+p+" and "+ne+" and "+z);
}
}

```

### 3)PROGRAM-3

```

import java.io.*;
import java.util.*;
public class prog3
{
    private static double[] r_item;
    private static int[] quan;
    private static int item;
    public static void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number of item");
        item=sc.nextInt();
        r_item=new double[item];
        quan=new int[item];
        System.out.println("Enter the Rate Per Item of "+ item +"items ");
        for(int i=0;i<item;i++)
        {

```

```

        System.out.println("Enter the per item cost of item: " + (i+1));
        r_item[i]=sc.nextDouble();
    }
    System.out.println("Enter the Number Of Item purchased ");
    for(int i=0;i<item;i++)
    {
        System.out.println("Enter The Quantity Of item: " + (i+1) + " Purchased ");
        quan[i]=sc.nextInt();
    }
}
public static double calc()
{
    read();
    double bill=0;
    double disc;
    for(int i=0;i<item;i++)
    {
        System.out.println(quan[i]);
        bill+=r_item[i]*quan[i];
    }
    System.out.println("Total Bill Without Discount is " + bill);
    if(bill>=10000)
    {
        disc=((5*bill)/(100));
        System.out.println("Discount Given is " + disc);
        bill=bill-disc;
        return bill;
    }
    if(bill>=7500&&bill<10000)
    {
        disc=((3*bill)/(100));

```

```

        System.out.println("Discount given is " + disc);
        bill=bill-disc;
        return bill;
    }
    if(bill>=5000&&bill<7500)
    {
        disc=((2*bill)/(100));
        System.out.println("Discount given is " + disc);
        bill=bill-disc;
        return bill;
    }
    System.out.println("Sorry No Discount Can Be Given");
    return bill;

}

public static void main(String[] args)
{
    double bill=calc();
    System.out.println("Final Bill Amount After Discount is " + bill);
}

}

```

#### PROGRAM-4)

```

import java.util.*;
import java.io.*;
public class prog4
{
    private static int[] a;
    private static int[] b;

```

```
private static int[] c;
private static int n;
public static void read()
{
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the number of elements in an array");
    n=sc.nextInt();
    a=new int[n];
    System.out.println("Enter the elements of array");
    for(int i=0;i<n;i++)
    {
        a[i]=sc.nextInt();
    }
}
public static int count_even()
{
    int count=0;
    for(int i=0;i<n;i++)
    {
        if(a[i]%2==0)
        {
            count++;
        }
    }
    return count;
}
public static int count_odd()
{
    int count=0;
    for(int i=0;i<n;i++)
    {
```

```

        if(a[i]%2!=0)
        {
            count++;
        }
    }
    return count;
}

```

```

public static int[] diff()
{
    int k1=0;
    int k2=0;
    read();
    int c1=count_even();
    int c2=count_odd();
    b=new int[c2];
    c=new int[c1];
    System.out.println(c1);
    System.out.println(c2);
    for(int i=0;i<n;i++)
    {
        if((a[i]%2)==0)
        {
            c[k1]=a[i];
            k1++;
        }
        if(a[i]%2!=0)
        {
            b[k2]=a[i];
            k2++;
        }
    }
}

```

```

    }
}
System.out.println("Contents Of Array With All Odd numbers is ");
for(int i=0;i<b.length;i++)
{
    if(b[i]!=0)
        System.out.println(b[i]);
    else
        break;
}
System.out.println("Contents Of Array With All Even Numbers is ");
for(int i=0;i<c.length;i++)
{
    if(c[i]!=0)
        System.out.println(c[i]);
    else
        break;
}
return c;
}
public static void calc()
{
    int[] array=diff();
    double sum=0;
    double average;
    int max=array[0];
    int min=array[0];
    for(int i=0;i<array.length;i++)
    {
        if(array[i]>max)
        {

```

```

        max=array[i];
    }
    if(array[i]<min)
    {
        min=array[i];
    }
    sum+=array[i];
}
average=((sum))/(array.length));

System.out.println("*****Displaying the contents Of Array With Even
Numbers*****");

System.out.println("Sum Of All Numbers Of An Array is " + sum);
System.out.println("Average Of " + " " + array.length + " Numbers is " + average);
System.out.println("Maximum Element in the array is " + max);
System.out.println("Minimum Element in the array is " + min);
}
public static void main(String[] args)
{
    calc();
}}

```