Extra programs.

1.
```
import java.util.Scanner;
class practice1
{
  public static void main(String args[])
  {
    Scanner sc= new Scanner(System.in);
    int n,i, se=0, so=0;
    System.out.println("Enter the number of elements to be entered in the array");
    n= sc.nextInt();
    int ar[]=new int[n];
    for(i=0; i<n;i++)
    {
      System.out.println("Enter the "+(i+1)+"element");
      ar[i]= sc.nextInt();
    }
    for(i=0; i<n; i++)
    {
      if(i%2==0)
      se=se+ar[i];
      else
      so=so+ar[i];
    }
    System.out.println("The sum of even indices is:
                        "+se);
    System.out.println("The sum of odd indices is:
                        "+so);
  }
}
```

2.
```
import java.util.Scanner;
class practice2
{
  public static void main(String args[])
  {
   Scanner sc= new Scanner(System.in);
   int n, i, p=0, neg=0, z=0;
   System.out.println("Enter the number of
   elements to be entered in the array");
   n=sc.nextInt();
   int ar[]=new int[n];
   for(i=0; i<n; i++)
   {
     System.out.println("Enter the " + (i+1) +
                        " element");
     ar[i]=sc.nextInt();
   }
   for(i=0; i<n; i++)
   {
     if (ar[i]>0)
     p++;
     else if (ar[i]==0)
     z++;
     else if (ar[i]<0)
     neg++;
   }
  System.out.println("The number of negative
  numbers is : "+neg);
  System.out.println("The number of zeros is: "
                     +z);
  System.out.println("The number of positive
                     numbers is: "+p);
  }
}
```

3.

```
import java.util.Scanner;
class practice3
{
 public static void main(String args[])
 {
  Scanner sc=new Scanner(System.in);
  int n,i;
  double amt=0.0, bill=0.0;
  System.out.println("Enter the number of items");
  n=sc.nextInt();
  double rate[]=new double[n];
  int quantity[]=new int[n];
  for(i=0; i<n; i++)
  {
   System.out.println("Enter the rate and
   quantity of " + (i+1) + " items");
   rate[i]=sc.nextDouble();
   quantity[i]=sc.nextInt();
   amt=amt+(rate[i] * quantity[i]);
  }
  if (amt>=10000)
  bill=0.95*amt;
  else if (amt>=7500 && amt<10000)
  bill=0.97*amt;
  else if (amt>=5000)
  bill:0.98*amt;
  System.out.println("Total bill amount before
  discount is: " +amt);
  System.out.println("Final bill amount after
  discount is : " + bill);
 }
}
```

4.

```
import java.util.Scanner;
class practical4
{
  public static void main(String args[])
  {
    Scanner sc=new Scanner(System.in);
    int n,i,o=0,e=0,j=0,k=0,sum=0,max,min;
    double avg;
    System.out.println("Enter the number of elements
    in the array");
    n=sc.nextInt();
    int a[]=new int[n];
    for(i=0;i<n;i++)
    {
     System.out.println("Enter the "+(i+1)+"element");
     a[i]=sc.nextInt();
     if(a[i]%2==0)
      e++;
     else
     o++;
    }
  int b[]=new int[o];
  int c[]=new int[e];
  for(i=0;i<n;i++)
  {
    if(a[i]%2!=0)
     {
       b[j]=a[i];
       j++;
     }
    else
     {
       c[k]=a[i];
       k++;
     }
  }
```

```
max = c[0];
min = c[0];
for(i=0; i<e; i++)
{
  sum = sum + c[i];
  if (min > c[i])
  min = c[i];
  else if (max < c[i])
  max = c[i];
}
avg = (double)(sum/e);
System.out.println("Maximum of array c is:"
                   + max);
System.out.println("Minimum of array c is:"
                   + min);
System.out.println("Sum of array c is:"+sum);
System.out.println("Average of array c is:"+avg);
}
}
```

```
import java.util.Scanner;
class practice1
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int n,i,se=0,so=0;
      System.out.println("Enter the number of elements to be entered in the array");
      n=sc.nextInt();
      int ar[]=new int[n];
      for(i=0;i<n;i++)
      {
         System.out.println("Enter the "+(i+1)+" element");
         ar[i]=sc.nextInt();
      }
      for(i=0;i<n;i++)
      {
         if(i%2==0)
         se=se+ar[i];
         else
         so=so+ar[i];
      }
      System.out.println("The sum of even indices is: "+se);
      System.out.println("The sum of odd indices is: "+so);
   }
}
```

```
C:\Users\Adithi\Desktop\java_prgs>javac practice1.java

C:\Users\Adithi\Desktop\java_prgs>java practice1
Enter the number of elements to be entered in the array
5
Enter the 1 element
4
Enter the 2 element
7
Enter the 3 element
8
Enter the 4 element
2
Enter the 5 element
4
The sum of even indices is: 16
The sum of odd indices is: 9

C:\Users\Adithi\Desktop\java_prgs>
```

```
import java.util.Scanner;
class practice2
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int n,i,p=0,neg=0,z=0;
      System.out.println("Enter the number of elements to be entered in the array");
      n=sc.nextInt();
      int ar[]=new int[n];
      for(i=0;i<n;i++)
      {
         System.out.println("Enter the "+(i+1)+" element");
         ar[i]=sc.nextInt();
      }
      for(i=0;i<n;i++)
      {
         if(ar[i]>0)
         p++;
```

```
        else if(ar[i]==0)
        z++;
        else if(ar[i]<0)
        neg++;
      }
      System.out.println("The number of negative numbers is: "+neg);
      System.out.println("The number of zeros is: "+z);
      System.out.println("The number of positive numbers is: "+p);
   }
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java practice2
Enter the number of elements to be entered in the array
6
Enter the 1 element
0
Enter the 2 element
-9
Enter the 3 element
-6
Enter the 4 element
0
Enter the 5 element
5
Enter the 6 element
1
The number of negative numbers is: 2
The number of zeros numbers is: 2
The number of positive numbers is: 2

C:\Users\Adithi\Desktop\java_prgs>
```

```
import java.util.Scanner;
class practice3
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int n,i;
      double amt=0.0,bill=0.0;
      System.out.println("Enter the number of items");
      n=sc.nextInt();
```

```
        double rate[]=new double[n];
        int quantity[]=new int[n];
        for(i=0;i<n;i++)
        {
           System.out.println("Enter the rate and quantity of "+(i+1)+" item");
           rate[i]=sc.nextDouble();
           quantity[i]=sc.nextInt();
           amt=amt+(rate[i]*quantity[i]);
        }
        if(amt>=10000)
        bill=0.95*amt;
        else if(amt>=7500 && amt<10000)
        bill=0.97*amt;
        else if(amt>=5000)
        bill=0.98*amt;
        System.out.println("Total bill amount before discount is: "+amt);
        System.out.println("Final bill amount after discount is: "+bill);
    }
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java practice3
Enter the number of items
4
Enter the rate and quantity of 1 item
4000
2
Enter the rate and quantity of 2 item
500
2
Enter the rate and quantity of 3 item
300
1
Enter the rate and quantity of 4 item
350
2
Total bill amount before discount is: 10000.0
Final bill amount after discount is: 9500.0

C:\Users\Adithi\Desktop\java_prgs>
```

```
import java.util.Scanner;
```

```
class practice4
{
   public static void main(String args[])
   {
      Scanner sc=new Scanner(System.in);
      int n,i,o=0,e=0,j=0,k=0,sum=0,max,min;
      double avg;
      System.out.println("Enter the number of elements to be entered in the array");
      n=sc.nextInt();
      int a[]=new int[n];
      for(i=0;i<n;i++)
      {
         System.out.println("Enter the "+(i+1)+" element");
         a[i]=sc.nextInt();
         if(a[i]%2==0)
         e++;
         else
         o++;
      }
      int b[]=new int[o];
      int c[]=new int[e];
      for(i=0;i<n;i++)
      {
         if(a[i]%2!=0)
         {
            b[j]=a[i];
            j++;
         }
         else
         {
            c[k]=a[i];
```

```
            k++;
          }
       }
       max=c[0];
       min=c[0];
       for(i=0;i<e;i++)
       {
          sum=sum+c[i];
          if(min>c[i])
          min=c[i];
          else if(max<c[i])
          max=c[i];
       }
       avg=(double)sum/e;
       System.out.println("Maximum of array c is:"+max);
       System.out.println("Minimum of array c is:"+min);
       System.out.println("Sum of array c is:"+sum);
       System.out.println("Average of array c is:"+avg);
    }
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java practice4
Enter the number of elements to be entered in the array
4
Enter the 1 element
3
Enter the 2 element
2
Enter the 3 element
6
Enter the 4 element
9
Maximum of array c is:6
Minimum of array c is:2
Sum of array c is:8
Average of array c is:4.0

C:\Users\Adithi\Desktop\java_prgs>
```