Extra Program.

1.
```
import java.util.*;
class array_sum
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        int n, even=0, odd=0;
        SOPln("Enter array size");
        n=sc.nextInt();
        int a[]= new int[n];
        SOPln("Enter values");
        for(int i=0; i<n; i++)
            a[i]=sc.nextInt();
        for(int i=0; i<n; i++)
        {
            if(i%2==0)
                even=even+a[i];
            else
                odd=odd+a[i];
        }
        SOPln("sum of even indices = "+even);
        SOPln("sum of odd indices = "+odd);
    }
}
```

2.

```
import java.util.*;
class array_count
{
    public static void main(String args[])
    {
        Scanner sc = new Scanner(System.in);
        int n, pos=0, neg=0, zero=0;
        SOPln("Enter array size");
        n = sc.nextInt();
        SOPln("Enter values");
        int a[] = new int[n];
        for(int i=0; i<n; i++)
            a[i]=sc.nextInt();
        for(int i=0; i<n; i++)
        {   if(a[i]==0)
                zero++;
            else if(a[i]>0)
                pos++;
            else
                neg++;
        }
        SOPln("no.of positive numbers = "+pos);
        SOPln("no.of negative numbers = "+neg);
        SOPln("no.of zeroes in array = "+zero);
    }
}
```

3.

```
import java.util.*;
class market_bill
{
    public static void main(String args[]);
    { Scanner sc = new Scanner (System.in);
      int x;
      SoPln (" Enter no. of items ");
      x = sc.nextInt();
      double tot = 0.0; total = 0.0;
      double rate = new double [x];
      int quatity = new int [x];
      for(int i=0; i< x ; i++)
      {   SoPln(" Enter price of item and
                  quantity ");
          rate [i] = sc.nextDouble();
          quantity [i] = sc.nextInt();
          tot = tot + (rate[i] * quantity [i]);
      }
      double dis;
      if ( tot ≥ 10000.0 )
          dis = 5.0;
      if ( tot ≥ 7500.0 && tot < 10000.0)
          dis = 3.0;
      if (tot ≥ 5000.0 && tot < 7500.0)
          dis = 2.0
      total = tot - ( dis * tot /100.0);
      SoPln (" Total bill before discount = "+tot);
      SoPln "Total bill after discount = ")+total);
    }
}
```

4.

```
import java.util.*;
class array_abc
{
    public static void main(String args[])
    {   Scanner sc=new Scanner(System.in);
        int n, ev=0, odd=0;
        SOPln("Enter array size");
        n=sc.nextInt();
        SOPln("Enter values");
        int a[] = new int[n];
        for(int i=0; i<n; i++)
        {   a[i]=sc.nextInt();
            if(a[i]%2==0)
                ev++;
            else
                odd++;
        }
        int b[]=new int[odd];
        int c[] = new int[ev];
        int x=0, y=0;

    for(int i=0; i<n; i++)
    {
        if(a[i]%2==0)
            c[x++]=a[i];
        else
            b[y++] = a[i];
    }
```

```
double sum=0.0, avg;
int max = c[0], min = c[0];
for(int i=0; i< ev; i++)
{
    sum = sum + c[i];
    if( c[i] > max)
        max = c[i];
    if ( c[i] < min)
        min = c[i];
}
avg = sum/ev;
SOPln("For array c :");
SOPln("Sum : "+sum);
SOPln("Average : "+avg);
SOPln("Maximum : "+ max);
SOPln("Minimum : "+ min);
}
}
```