# Week 3 Practice Programs.

1)

```
import java.util.*;
class extraprogram1 {
  public static void main (String, args[])
  {
     Scanner ss = new Scanner (System.in);
     int a[], n, even=0, odd=0;
     System.out.println ("Enter the number of elements");
     n = ss.nextInt()
     a = new int [n];
     System.out. println ("Enter the elements :");
     for(int i=0; i<n; i++)
      {
        System.out.println ("Enter a["+i+"]");
        a[i] = ss.nextInt();
        }
    for(int i=0;i<n;i++) {
     if (i%2==0)
      even+= a[i];
     else
      odd+= a[i];
    }
System.out.println("Sum of even indices of the array:"+
                                          even);
System.out.println ("Sum of odd indices of the array:"+
                                          odd);

  }
}
```

2)

```
import java.util.*;
class extraprogram2 {
    public static void main(String ss[]){
        int l=0,p=0,z=0;
        int a[];
        Scanner s=new Scanner(System.in);
        System.out.println("Enter the number of elements (n):");
        int n=s.nextInt();
        System.out.println("Enter the elements:");
        a=new int[n];
        for(int i=0;i<n;i++)
        {System.out.println("Enter a["+i+"]:");
          a[i]=s.nextInt();
        }
        for(int i=0;i<n;i++)
        {
            if(a[i]<0)
            {l++;
            }
            else if(a[i]>0)
            {  p++;
            }
            else
              {z++;
              }
        }
        System.out.println("Number of positive elements:"+p);
        System.out.println("Number of negative elements:"+l);
        System.out.println("Number of zeros:"+z);
    }
}
```

3]

```
import java.util.Scanner;
public class extraprogram3 {
    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 the 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);
}}}
```

4.

```
import java.util.*;
class extraprogram4 {
  public static void main (String ss[]){
    int a[], b[], c[], n1=0, n2=0, sum=0, min, max;
    double avg;
    Scanner s = new Scanner (System.in);
    System.out.println("Enter the number of elements (n):");
    int n=s.nextInt();
    System.out.println("Enter the elements:");
    a=new int[n];
    b=new int[n];
    c=new int[n];
    for(int i=0; i<n; i++)
    {
      System.out.println("Enter a["+i+"]");
      a[i]=s.nextInt();
    }
    for(int i=0;i<n;i++)
    {
      if(a[i]%2!=0)
      {
        b[n1]=a[i];
        n1++;
      }
      else if(a[i]%2==0)
      {
        c[n2]=a[i];
        n2++;
      }
    }
    max=c[0];
    min=c[0];
```

```
for (int i=0; i<n2; i++)
 {
    sum = sum+c[i];
    if (c[i] > max)
       max = c[i];
    else if (c[i] < min)
       min = c[i];
  }
  avg = (double) sum / n2;
  System.out.println ("Sum of even elements:" + sum);
  System.out.println ("Average of even elements:" +avg);
  System.out.println ("Maximum of even elements:" +max);
  System.out.println ("Minimum of even elements:" + min);
    }
}
```