```
}
}}.
```

⇒ Accept an array of size n from the user. Find the sum of even indices and sum of odd indices (1, 3, 5 ---) and print the same.

```
import java.util.Scanner;
class Aarray1{
  Public static void main(String args[]){
    Scanner s1 = new Scanner(System.in);
    int a1[]; int sum1=0, sum2=0;
    System.out.println("Enter size of array");
    int n=s1.nextInt();
    a1 = new int[n];
    for(int i=0; i<n; i++)
    {
      System.out.println("Enter a["+i+"]");
      a1[i] = s1.nextInt();
    }
    for(i=0; i<n; i=i+2)
    {
      sum1= sum1 + a1[i];
    }
    for(i=1; i<n; i=i+2)
      sum2 = sum2 + a1[i];
    System.out.println("Sum of even indices
                is "+sum1);
    System.out.println("Sum of odd indices
                is "+sum2);
}
}
```

week1_1.java | week1_2.java | week1_3.java

```java
import java.util.Scanner;
class Evenoddarray{
    public static void main(String args[]){
        Scanner s1=new Scanner(System.in);
        int a1[], sum1=0, sum2=0;
        System.out.println("Enter the size of the array");
        int n=s1.nextInt();
        a1=new int[n];
        for(int i=0;i<n;i++)
        {
            System.out.println("Enter a1["+i+"]");
            a1[i]=s1.nextInt();
        }
        for(int i=0;i<n;i=i+2)
            sum1=sum1+a1[i];
        for(int i=1;i<n;i=i+2)
            sum2=sum2+a1[i];
        System.out.println("Sum of even indices is "+sum1);
        System.out.println("Sum of odd indices is "+sum2);
    }
}
```

```
C:\Users\harshitha>cd ..

C:\Users>cd ..

C:\>cd C:\Program Files\Java\bin\basic

C:\Program Files\Java\bin\basic>javac week1_1.java
'javac' is not recognized as an internal or external command,
operable program or batch file.

C:\Program Files\Java\bin\basic>set path="C:\Program Files\Java\bin"

C:\Program Files\Java\bin\basic>javac week1_1.java

C:\Program Files\Java\bin\basic>java Evenoddarray
Enter the size of the array
5
Enter a1[0]
2
Enter a1[1]
45
Enter a1[2]
54
Enter a1[3]
2
Enter a1[4]
1
Sum of even indices is 57
Sum of odd indices is 47
```

⇒ Accept an array of n integers. Find the numbers of positive numbers, negative numbers and zeros.

→
```
import java.util.Scanner
class Posnegzero {
    public static void main(String args[]){
        Scanner sl = new Scanner(System.in);
        int a[], pos=0, neg=0, zero=0;
        System.out.println("Enter the size of
                                the array");
    int n = sl.nextInt();   a = new int[n];
        for(i=0; i<n; i++)
        {
        System.out.println("Enter a["+i+"]");
          a[i] = sl.nextInt();
        }
    for(i=0; i<n; i++)
    {   if(a[i] > 0)
            pos++;
        else if(a[i] < 0)
            neg++;
        else
            zero++;
    }
    System.out.println("Noumbes of
        positive numbes = "+pos+", Numbes
        of negative numbers = "+neg+" and
        Numbes of zeroes = "+zero);

}
}
```

week1_1.java | week1_2.java | week1_3.java

```java
import java.util.Scanner;
class Posnegzero{
    public static void main(String args[]){
        Scanner s1=new Scanner(System.in);
        int a[], pos=0, neg=0, zero=0;
        System.out.println("Enter the size of the array");
        int n=s1.nextInt();
        a=new int[n];
        for(int i=0;i<n;i++)
        {
            System.out.println("Enter a1["+i+"]");
            a[i]=s1.nextInt();
        }
        for(int i=0;i<n;i++){
            if(a[i]>0)
                pos++;
            else if(a[i]<0)
                neg++;
            else
                zero++;
        }
        System.out.println("Number of positive numbers="+pos+", Number of negati
    }
}
```

```
C:\Program Files\Java\bin\basic>javac week1_2.java

C:\Program Files\Java\bin\basic>java Posnegzero
Enter the size of the array
5
Enter a1[0]
2
Enter a1[1]
3
Enter a1[2]
43
Enter a1[3]
5
Enter a1[4]
76
Number of positive numbers=5, Number of negative numbers=0 and Number of zero
es=0

C:\Program Files\Java\bin\basic>javac week1_2.java

C:\Program Files\Java\bin\basic>java Posnegzero
Enter the size of the array
5
Enter a1[0]
-4
Enter a1[1]
2
Enter a1[2]
0
Enter a1[3]
0
Enter a1[4]
-4
Number of positive numbers=1, Number of negative numbers=2 and Number of zero
es=2
```

⇒ Consider a super market bill. Accept a double array holding rate per item of say x items and an int array showing the quantity purchased by a customer. Calculate the total bill and final bill amount after giving discounts as per the following slabs.

If bill amount >=10000, discount = 5%.
If bill amount >=7500 & <10000, discount = 3%.
If total bill >=5000, discount = 2%.

⇒
```
import java.util.Scanner
class Bill {
  public static void main(String args[])
  {
    Scanner sl = new Scanner(System.in);
    double A[]
    int B[]
    System.out.println("Enter the number of items");
    int x = sl.nextInt(); A = new double[x]; B = new int[x];
    for(int i = 0; i < x; i++)
    {
      System.out.println("Enter the price of item" + i + "and its quantity");
      A[i] = sl.nextDouble();
      B[i] = sl.nextInt();
    }
    double total = 0.0, final;
    for(int i = 0; i < x; i++)
    {
      total = total + (A[i] * B[i]);
    }
```

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```
if (total >= 10000)
final = total -((5 * total)/100);
else if((total >= 7500) && (total < 10000))
final = total - ((3 * total)/100);
else if ((total >= 5000) && (total < 7500))
final = total - ((2 * total)/100);
else
final = total;
System.out.println("The total bill
        amount is Rs." + total);
System.out.println("The final bill amount
        after discount is Rs." + final);
}
}
```

2020/9/29

week1_1.java | week1_2.java | week1_3.java

```java
import java.util.Scanner;
class Bill{
    public static void main(String args[]){
        Scanner s1=new Scanner(System.in);
        double A[],amt,total=0.0;
        int B[];
        System.out.println("Enter the number of items x");
        int x=s1.nextInt();
        A=new double[x];
        B=new int[x];
        for(int i=0;i<x;i++)
        {
            System.out.println("Enter the price of item "+i+" and the quatity of
            A[i]=s1.nextDouble();
            B[i]=s1.nextInt();
        }
        for(int i=0;i<x;i++){
            total=total+(A[i]*B[i]);
        }
        if(total>=10000.0){
            amt=total-((5*total)/100.0);
        }
        else if((total>=7500.0)&&(total<10000.0)){
            amt=total-((3*total)/100.0);
        }
        else if((total>=5000.0)&&(total<7500.0)){
            amt=total-((2*total)/100.0);
        }
        else{
            amt=total;
        }
        System.out.println("The total bill amount is " +total);
        System.out.println("The final bill amount after discount is " +amt);
    }
}
```

```
C:\Program Files\Java\bin\basic>javac week1_3.java

C:\Program Files\Java\bin\basic>java Bill
Enter the number of items x
5
Enter the price of item 0 and the quatity of the same
240.4
3
Enter the price of item 1 and the quatity of the same
333.56
2
Enter the price of item 2 and the quatity of the same
5554
1
Enter the price of item 3 and the quatity of the same
343
1
Enter the price of item 4 and the quatity of the same
4332
2
The total bill amount is 15949.32
The final bill amount after discount is 15151.854
```

⇒ Accept an Array A of n elements. Create two new elements where the first one say B that holds all the numbers from array A. and the second say C holds the even numbers from array A. Display the sum, average, max & min of array C.

→
```
import java.util.Scanner;
class Threearrays{
    Public Static void main(String args[]){
      Scanner s1= new Scanner(System.in);
      int a[], b[], c[], i, j=0, k=0, sum=0,
                    max, min;
      System.out.println("Enter the size of
                    the array A");
      int n=s1.nextInt();
      a=new   int[n];
      b=new  int[n];
```

```
c=new int[n];
for(i=0; i<n; i++)
{
   System.out.println("Enter a[" + i + "]");
   a[i]=sl.nextInt();
   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<k; i++)
 { sum=sum+c[i];
   if(c[i] > max)
     max=c[i];
   else if(c[i] < min)
     min=c[i];
 }
float avg=sum/(float)k;
System.out.println("Sum of elements in c=" +sum);
System.out.println("Average of elements in c=" +avg);
System.out.println("Max  "  "  =" +max);
System.out.print("Min  "  "  =" +min);
```

week1_1.java | week1_2.java | week1_3.java | week1_4.java

```java
import java.util.Scanner;
class Threearrays{
    public static void main(String args[]){
        Scanner s1=new Scanner(System.in);
        int a[],b[],c[],i,j=0,k=0,sum=0,max,min;
        System.out.println("Enter the size of the array a");
        int n=s1.nextInt();
        a=new int[n];
        b=new int[n];
        c=new int[n];
        for(i=0;i<n;i++)
        {
            System.out.println("Enter a["+i+"]");
            a[i]=s1.nextInt();
            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<k;i++){
            sum=sum+c[i];
            if(c[i]>max)
                max=c[i];
            if(c[i]<min)
                min=c[i];
        }
        float avg=sum/(float)k;
        System.out.println("Sum of elements in array C= "+sum);
        System.out.println("Average of elements in array C = "+avg);
        System.out.println("Maximum of elements in array C = "+max);
        System.out.println("Minimum of elements in array C = "+min);
    }
}
```

Command Prompt

```
C:\Program Files\Java\bin\basic>javac week1_4.java

C:\Program Files\Java\bin\basic>java Threearrays
Enter the size of the array a
6
Enter a[0]
3
Enter a[1]
4
Enter a[2]
2
Enter a[3]
6
Enter a[4]
8
Enter a[5]
31
Sum of elements in array C= 34
Average of elements in array C = 17.0
Maximum of elements in array C = 31
Minimum of elements in array C = 3

C:\Program Files\Java\bin\basic>
```