```java
import java.util.Scanner;
class E1{
public static void main(String args[]){
int a[]= new int[10];
Scanner in=new Scanner(System.in);
int i,sum_e=0,sum_o=0;
System.out.println("enter the size of array");
int n=in.nextInt();
System.out.println("enter the elements");
for (i=0;i<=n;i++)
{
a[i]=in.nextInt();
}
for (i=0;i<=n;i++)
{
if(i%2==0)
sum_e=sum_e +a[i];
else
sum_o=sum_o +a[i];
}
System.out.println("The sum of even numbers is:"+sum_e);
 System.out.println("The sum of odd numbers is:"+sum_o);
}

}
```

```
C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>javac E1.java

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>java E1
enter the size of array
5
enter the elements
1
23
45
89
63
42
The sum of even numbers is:109
The sum of odd numbers is:154
```

```java
import java.util.Scanner;
class E2{
   public static void main(String args[]){
      int s[];
      s=new int[10];

Scanner h =new Scanner(System.in);
int i,p=0,z=0,n=0;
System.out.println("enter the size of array");
int k=h.nextInt();

System.out.println("enter the elements");
for (i=0;i<=k;i++)
{
s[i]=h.nextInt();
}
for (i=0;i<=k;i++)
{
if(s[i]<0)
 n++;
else if(s[i]>0)
 p++;
else if(s[i]==0)
 z++;
}
System.out.println("the number of positive integers are :"+p);
System.out.println("the number of negative integers are :"+n);
System.out.println("the number of zeros are :"+z);
}
}
```

```
C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>javac E2.java

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>java E2
enter the size of array
6
enter the elements
1
2
-9
0
4
5
3
the number of positive integers are :5
the number of negative integers are :1
the number of zeros are :1
```

```java
import java.util.Scanner;
class E3{
public static void main(String args[]){
double a[];
a=new double[10];
int b[];
b=new int[10];

Scanner n=new Scanner(System.in);
int c,d,i,x;
double tot,sem_tot=0;
System.out.println("enter the number of items");
x=n.nextInt();
System.out.println("enter the rate and quantity of the items:");
for(i=0;i<=x;i++)
{
a[i]=n.nextDouble();
b[i]=n.nextInt();

System.out.println("");
}
for(i=0;i<=x;i++)
{
sem_tot=sem_tot+(a[i]*b[i]);
}
if (sem_tot>=10000)
tot=sem_tot*0.95;
else if (sem_tot>=7500)
tot=sem_tot*0.97;
else if (sem_tot>=5000)
tot=sem_tot*0.98;
else
tot=sem_tot;
System.out.println("total befor discount is:"+sem_tot);
System.out.println("total after discount is:"+tot);
}
}
```

```
C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>javac E3.java

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>java E3
enter the number of items
6
enter the rate and quantitity of the items:
200 5

359 12

778 4

2000 6

1999 3

4565 1

3999 4

total befor discount is:46978.0
total after discount is:44629.1
```

```java
import java.util.Scanner;
class E4{
public static void main(String args[]){
int a[],b[],c[];
a=new int[10];
b=new int[10];
c=new int[10];
int j=0,k=0,n,i,max=0,sum=0;
Scanner p=new Scanner(System.in);
System.out.println("Enter the number of elements");
n=p.nextInt();
System.out.println("Enter the elements");
for(i=0;i<n;i++)
{
a[i]=p.nextInt();
}
for (i=0;i<n;i++)
{
if(a[i]%2==0)
b[j++]=a[i];
else
c[k++]=a[i];
}
for(i=0;i<k;i++)
sum=sum+c[i];
double avg=sum/j;
for(i=0;i<k;i++)
{
if (c[i]>max)
max=c[i];
}
int min=max;
for(i=0;i<k;i++)
{
```

```java
sum=sum+c[i];
double avg=sum/j;
for(i=0;i<k;i++)
{
if (c[i]>max)
max=c[i];
}
int min=max;
for(i=0;i<k;i++)
{
if(c[i]<min)
min=c[i];
}
System.out.println("the odd number are:");
for(i=0;i<k;i++)
System.out.println(c[i]);
System.out.println("the even number are:");
for(i=0;i<j;i++)
System.out.println(+b[i]);
System.out.println("the sum of all odd numbers is:"+sum);
System.out.println("the avg of all the odd numbers is:"+avg);
System.out.println("the largest odd number is:"+max);
System.out.println("The smallest odd number is:"+min);
}
}
```

```
C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>javac E4.java

C:\Users\PUNEETH K\Desktop\JAVA\LAB Programs>java E4
Enter the number of elements
9
Enter the elements
1
2
3
4
5
6
7
8
9
the odd number are:
1
3
5
7
9
the even number are:
2
4
6
8
the sum of all odd numbers is:25
the avg of all the odd numbers is:6.0
the largest odd number is:9
The smallest odd number is:1
```