

Code:

```
import java.util.*;
import java.io.*;
public class lab1_ex_04
{
    private static int[] a;
    private static int[] b;
    private static int[] c;
    private static int n;
    public static void read()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number of elements in an array");
        n=sc.nextInt();
        a=new int[n];
        System.out.println("Enter the elements of array");
        for(int i=0;i<n;i++)
        {
            a[i]=sc.nextInt();
        }
    }
    public static int count_even()
    {
        int count=0;
        for(int i=0;i<n;i++)
        {
            if(a[i]%2==0)
            {
                count++;
            }
        }
    }
}
```

```
        return count;
    }
    public static int count_odd()
    {
        int count=0;
        for(int i=0;i<n;i++)
        {
            if(a[i]%2!=0)
            {
                count++;
            }
        }
        return count;
    }
}
```

```
public static int[] diff()
{
    int k1=0;
    int k2=0;
    read();
    int c1=count_even();
    int c2=count_odd();
    b=new int[c2];
    c=new int[c1];
    System.out.println(c1);
    System.out.println(c2);
    for(int i=0;i<n;i++)
    {
        if((a[i]%2)==0)
        {
```

```

        c[k1]=a[i];
        k1++;
    }
    if(a[i]%2!=0)
    {
        b[k2]=a[i];
        k2++;
    }
}
System.out.println("Contents Of Array With All Odd numbers is ");
for(int i=0;i<b.length;i++)
{
    if(b[i]!=0)
        System.out.println(b[i]);
    else
        break;
}
System.out.println("Contents Of Array With All Even Numbers is ");
for(int i=0;i<c.length;i++)
{
    if(c[i]!=0)
        System.out.println(c[i]);
    else
        break;
}
return c;
}
public static void calc()
{
    int[] array=diff();
    double sum=0;

```

```

double average;
int max=array[0];
int min=array[0];
for(int i=0;i<array.length;i++)
{
    if(array[i]>max)
    {
        max=array[i];
    }
    if(array[i]<min)
    {
        min=array[i];
    }
    sum+=array[i];
}
average=(((sum))/(array.length));

System.out.println("*****Displaying the contents Of Array With Even
Numbers*****");

System.out.println("Sum Of All Numbers Of An Array is " + sum);
System.out.println("Average Of " + " " + array.length + " Numbers is " + average);
System.out.println("Maximum Element in the array is " + max);
System.out.println("Minimum Element in the array is " + min);
}
public static void main(String[] args)
{
    calc();
}
}

```

Output:

```
2
3
5
Total Bill Without Discount is 64000.0
Discount Given is 3200.0
Final Bill Amount After Discount is 60800.0

c:\00J-lab-programs>java lab1_ex_04
Enter the number of elements in an array
4
Enter the elements of array
1
2
3
4
2
2
Contents Of Array With All Odd numbers is
1
3
Contents Of Array With All Even Numbers is
2
4
*****Displaying the contents Of Array With Even Numbers*****
Sum Of All Numbers Of An Array is 6.0
Average Of 2 Numbers is 3.0
Maximum Element in the array is 4
Minimum Element in the array is 2
c:\00J-lab-programs>
```