1.Write a program to create a arraylist of double element and add the elements. sort the elements in descending order and print it.

```java
package sba1;

import java.util.ArrayList;

import java.util.Collections;

import java.util.Scanner;


public class Question1 {

        public static void main(String[] args) {

            ArrayList<Double> a1= new  ArrayList<Double>();

            Scanner sc=new Scanner(System.in);

            System.out.println("enter the no of  elements");

            int n=sc.nextInt();

            System.out.println("enter the double elements");

            for(int i=0;i<n;i++) {

                    a1.add(sc.nextDouble());

            }

            System.out.println("The array list: "+a1);

            System.out.println("Elements in descending order");

            Collections.sort(a1,Collections.reverseOrder());

            for(Double value:a1)

                    {System.out.println(value);

                    }}

}}
```

//Output

```
enter the no of  elements
3
enter the double elements
25.3
41
36.5
The array list: [25.3, 41.0, 36.5]
Elements in descending order
41.0
36.5
25.3
```
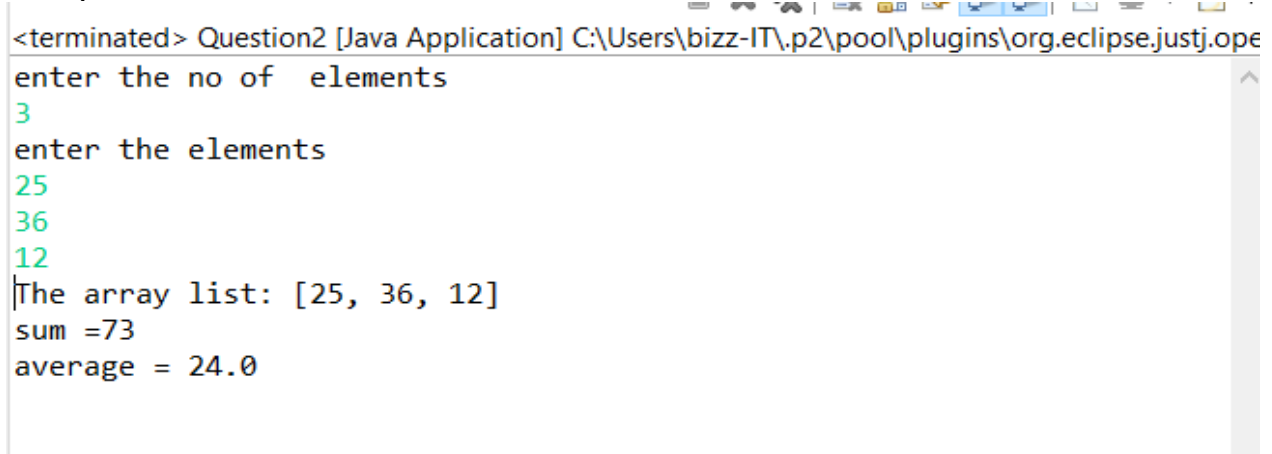
2.Create a arraylist of integers and find the sum and average of the entire list.

```java
package sba1;
import java.util.ArrayList;
import java.util.Scanner;

public class Question2 {
    public static void main(String[] args) {
        ArrayList<Integer> a1= new  ArrayList<Integer>();
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the no of  elements");
        int n=sc.nextInt();
        System.out.println("enter the elements");
        for(int i=0;i<n;i++) {
           a1.add(sc.nextInt());
        }
        System.out.println("The array list: "+a1);
        int sum=0;float avg;
        for( int i=0;i<n;i++) {
           sum=sum+a1.get(i);
        }
        System.out.println("sum ="+sum);
        avg=sum/n;

        System.out.println("average = "+avg);
    }}
```
//Output

<terminated> Question2 [Java Application] C:\Users\bizz-IT\.p2\pool\plugins\org.eclipse.justj.ope

```
enter the no of  elements
3
enter the elements
25
36
12
The array list: [25, 36, 12]
sum =73
average = 24.0
```

3. Create two arraylist of strings to take First_name and Last_name of the students,and print their whole name.

```java
package sba1;


import java.util.ArrayList;
import java.util.Scanner;

public class Question3 {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the number of students");
        int n=sc.nextInt();
        ArrayList<String> a1= new  ArrayList<String>();
        ArrayList<String> a2= new  ArrayList<String>();
        for(int i=1;i<=n;i++) {
            System.out.println("enter first name ");
            a1.add(sc.next());
            System.out.println("enter the second name");
            a2.add(sc.next());
        }
        for(int i=0;i<n;i++) {
            System.out.println("fullname :"+a1.get(i)+" "+a2.get(i));

        }
}}
```

//Output

<terminated> Question3 [Java Application] C:\Users\bizz-IT\.p2\pool\plugins\org.eclipse.justj.c
enter the number of students
2
enter first name
Anju
enter the second name
Rajiv
enter first name
Sachin
enter the second name
Tendulakr
fullname :Anju Rajiv
fullname :Sachin Tendulakr

4.Write a program to check for the occurrence of a particular character in a string and display how many times it has occurred.
note: take the String and the character to be checked as a input from the user.

```java
package sba1;
import java.util.Scanner;

public class Question4 {

    public static void main(String[] args) {
            int count=0;
    Scanner sc=new Scanner(System.in);
    System.out.println("enter the string ");
    String s=sc.next();
    System.out.println("enter the character to find occurence");
    char s2=sc.next().charAt(0);
    for( int i=0;i<s.length();i++) {
       if(s.charAt(i)==s2) {

            count++;
    }
    }
    System.out.println("occurance of "   +s2+" in the string  " +s+ "=" +count);
    }}
```

//Output

enter the string
malayalam
enter the character to find occurence
a
occurance of a in the string malayalam=4

5.Write a program to take an input of a string with multiple words and convert it
into a string array,
and check if every element of that array is a Palindrome.
Note: Palindrome is a word which when reversed also is the same.

```java
package sba1;
import java.util.Scanner;
public class Question5 {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the string ");
        String str=sc.nextLine();
        String strArray[]=str.split(" ");

        System.out.println("String : "+str);
        System.out.print("String array:[");
        for(int i=0;i<strArray.length;i++) {
            System.out.print(strArray[i]+", ");
        }
        System.out.print(" ]"+"\n");
        String word;
        for(int i=0;i<strArray.length;i++)
        {
        word=strArray[i];
        char[] str1=new char[word.length()];
        int count =0;
        for(int j=word.length()-1;j>=0;j--) {
            str1[count]=word.charAt(j);
            count++;
        }
        String word2=new String(str1);
        if(word.equals(word2)) {
        System.out.println("Palindrome word: "+word);

         }}

    }}
```

//Output

```
enter the string
my mom speaks malayalam
String : my mom speaks malayalam
String array:[my, mom, speaks, malayalam,  ]
Palindrome word: mom
Palindrome word: malayalam
```