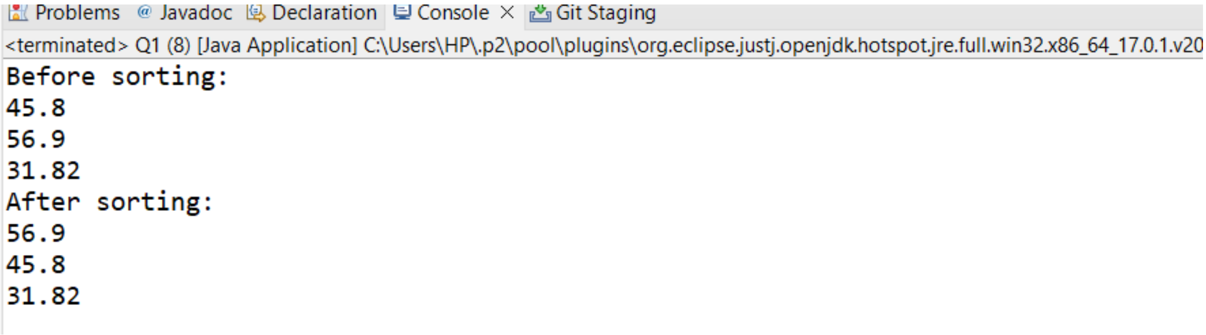
1.Write a program to create an arraylist of double element and add the elements. sort the elements in descending order and print it.

CODE:

```
package sba1;

import java.util.*;
import java.util.Collections;

public class Q1 {
      public static void main(String[] args) {
       ArrayList<Double>list =new ArrayList<Double>();
       list.add(45.8);
       list.add(56.90);
       list.add(31.82);
System.out.println("Before sorting:");
      for(double newlist:list)
      {
            System.out.println(newlist);
      }
      Collections.sort(list,Collections.reverseOrder());
      System.out.println("After sorting:");
      for(double newlist:list)
      {
            System.out.println(newlist);
            }
      }
}
```

OUTPUT:



<terminated> Q1 (8) [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20

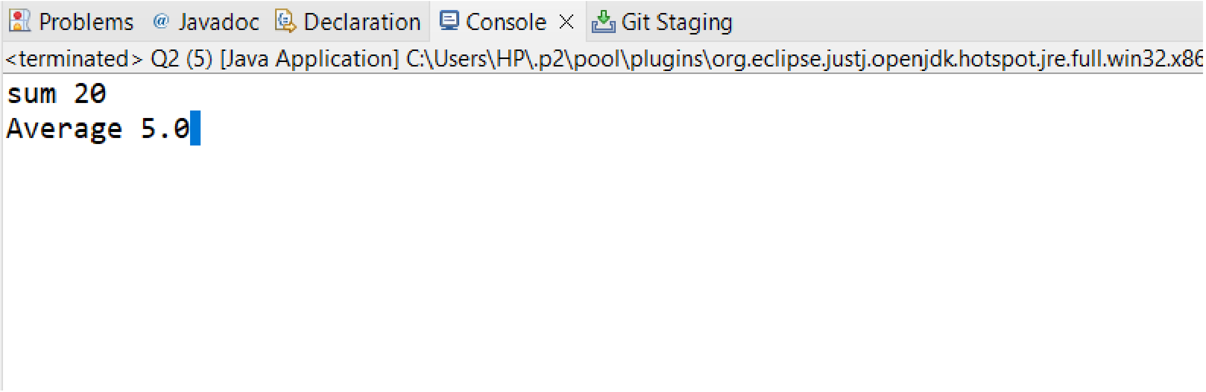
```
Before sorting:
45.8
56.9
31.82
After sorting:
56.9
45.8
31.82
```

2.Create a arraylist of integers and find the sum and average of the entire list.

CODE:

```
package sba1;

import java.util.ArrayList;

public class Q2 {

	public static void main(String[] args) {
		ArrayList<Integer> sum = new ArrayList<Integer>();
		sum.add(2);
		sum.add(8);
		sum.add(4);
		sum.add(6);
		int total=0;
		double avrg;
		for(int i=0;i<sum.size();i++)
			
			total= total+sum.get(i);
			avrg= total/sum.size();
			System.out.println("sum "+total);
			System.out.println("Average "+avrg);
	}
}
```

OUTPUT:



<terminated> Q2 (5) [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86

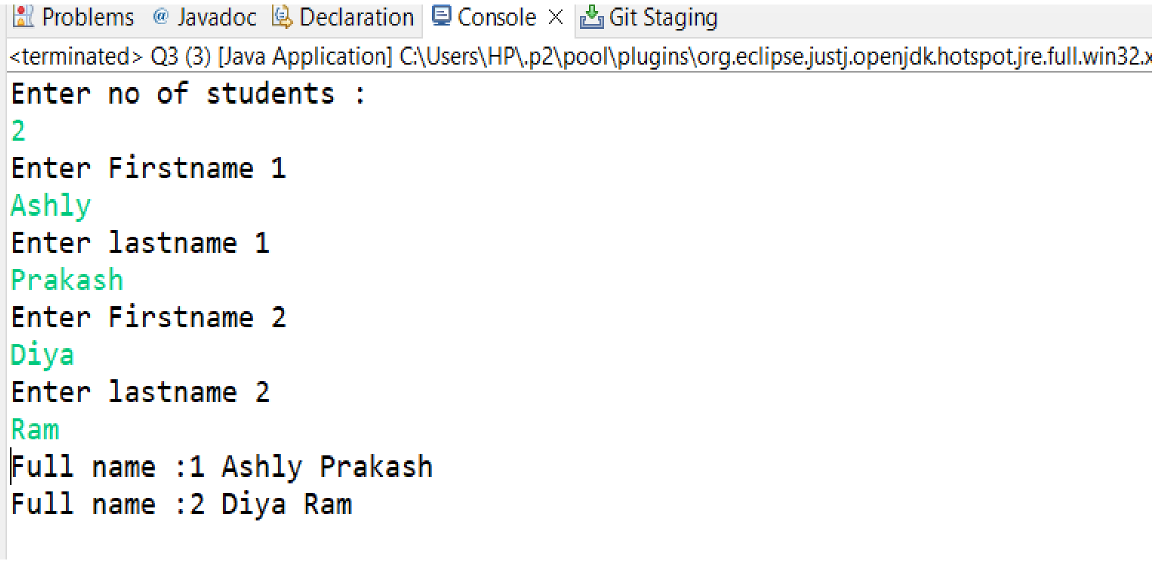
```
sum 20
Average 5.0
```

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

CODE:

```
package sba1;

import java.util.ArrayList;

public class Q2 {

    public static void main(String[] args) {
        ArrayList<Integer> sum = new ArrayList<Integer>();
        sum.add(2);
        sum.add(8);
        sum.add(4);
        sum.add(6);
        int total=0;
        double avrg;
        for(int i=0;i<sum.size();i++)

            total= total+sum.get(i);
            avrg= total/sum.size();
            System.out.println("sum "+total);
            System.out.println("Average "+avrg);
    }
}
```

OUTPUT:



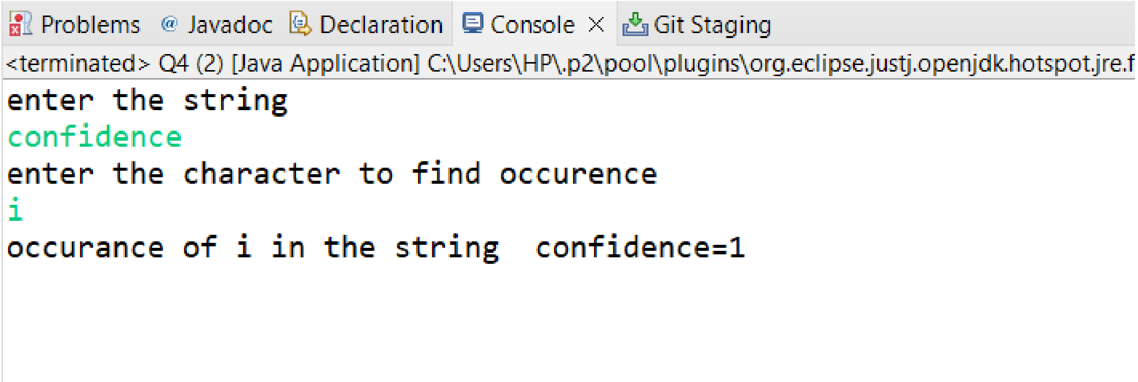
```
<terminated> Q3 (3) [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x
Enter no of students :
2
Enter Firstname 1
Ashly
Enter lastname 1
Prakash
Enter Firstname 2
Diya
Enter lastname 2
Ram
Full name :1 Ashly Prakash
Full name :2 Diya Ram
```

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.

CODE:

```
package sba1;

import java.util.Scanner;

public class Q4 {

     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:



```
<terminated> Q4 (2) [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.f
enter the string
confidence
enter the character to find occurence
i
occurance of i in the string  confidence=1
```

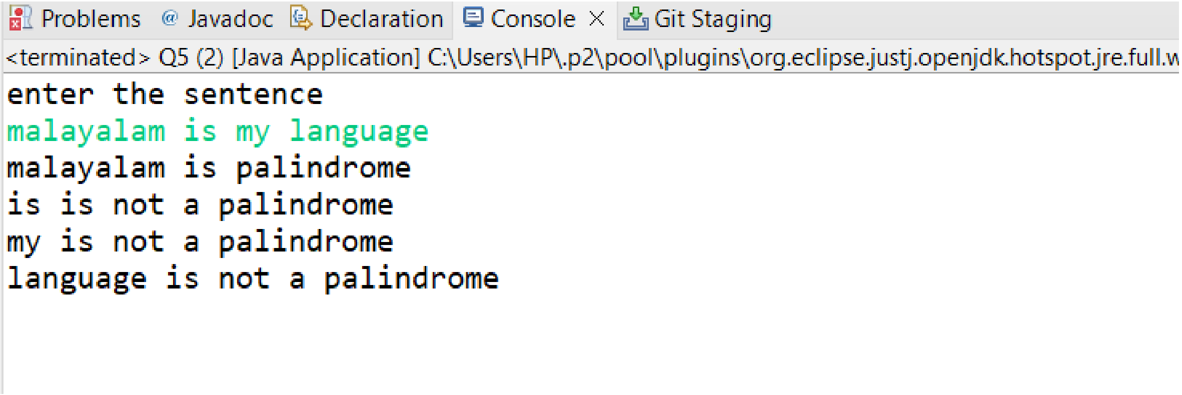
5.Write a program to take an input of a string with multiple words and convert it into a string array, and check if every element of that array is a Palindrome.

Note: Palindrome is a word which when reversed also is the same.

CODE:

```
package sba1;
import java.util.Scanner;
public class Q5 {
    public static boolean checkpalindrome(String str)
        {
        int len =str.length();
            for(int i=0;i<len/2;i++) {
                if(str.charAt(i)!=str.charAt(len-i-1))
                    return false;
            }
            return true;
        }
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter the sentence");
        String str=sc.nextLine();
        String[] arr=str.split(" ");
        int n=arr.length;
        for(int i=0;i<n;i++)
            if(Q5.checkpalindrome(arr[i])) {
        System.out.println(arr[i]+" is palindrome");
            }
            else
                System.out.println(arr[i]+" is not a 
palindrome");
    }
}
```

OUTPUT:



<terminated> Q5 (2) [Java Application] C:\Users\HP\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.w

```
enter the sentence
malayalam is my language
malayalam is palindrome
is is not a palindrome
my is not a palindrome
language is not a palindrome
```