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

Code:

```
import java.util.*;
import java.util.Collections;
public class Question1 {
public static void main(String[] args) {
ArrayList<Double>list =new ArrayList<Double>();
list.add(28.92);
list.add(55.09);
list.add(72.98);
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

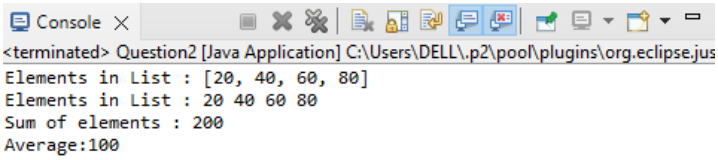
```
Before sorting:
28.92
55.09
After Sorting:
55.09
28.92
```

2. Create an array list of integers and find the sum and average of the entire list.

Code:

```
import java.util.*;
public class Qestion2{
public static void main(String[] args) {
List < Integer > list = new ArrayList < Integer > ();
list.add(20);
list.add(40);
list.add(60);
list.add(80);
System.out.println("Elements in List : " + list);
Integer a[] = new Integer[list.size()];
list.toArray(a);
System.out.print("Elements in List : ");
for (Integer obj : a) {
System.out.print(obj + " "); }
int sum = sumOfArray(a, a.length - 1);
System.out.println();
System.out.println("Sum of elements : " + sum);
int avg;
avg=sum/2;
System.out.println("Average:"+ avg); }
public static int sumOfArray(Integer[] a, int n) {
if (n == 0)
return a[n];
else
return a[n]+sumOfArray(a, n - 1); } }
```

Output:



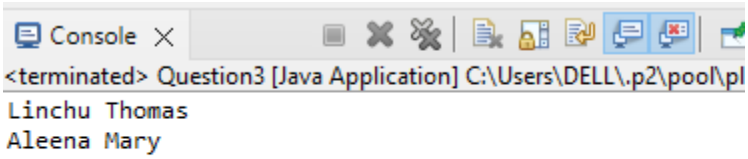
3. Create two array list of strings to take First name and Last name of the students, and print their whole name.

Code:

```
import java.util.*;

public class Question3 {

public static void main(String[] args) {

List<String> First_Name = new ArrayList<String>();

List<String> Last_Name = new ArrayList<String>();

String string1 = "Linchu";

First_Name.add(string1);

String string2 = "Aleena"

First_Name.add(string2);

String string3 = "Thomas";

LastName.add(string3);

String string4 = "Mary";

Last_Name.add(string4);

Iterator<String> iterator = First_Name.iterator();

Iterator<String> iterator1 = Last_Name.iterator();

List<String> name = new ArrayList<String>();

while (iterator.hasNext()&& iterator1.hasNext() ) {

name.add(iterator.next()+" "+iterator1.next()); }
```

```
Iterator<String> iterator11 = name.iterator();

while(iterator11.hasNext())

System.out.println(iterator11.next());

}

}
```

Output:



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.

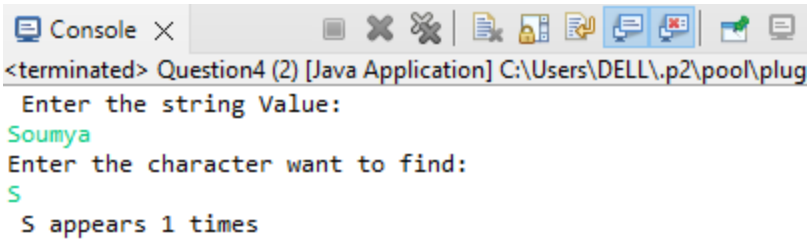
Code:

```
import java.util.*;

public class Question4 {

public static void main(String[] args) {

Scanner sc=new Scanner(System.in);

String J;

int count =0;

System.out.println(" Enter the string Value: ");

J=sc.nextLine();

System.out.println("Enter the character want to find: ");

char a = sc.next().charAt(0);

for(int i=0;i<J.length();i++){

if(J.charAt(i)==a)
```

count++; }

System.out.println(" "+a+" appears "+count+" times"); } }

Output:

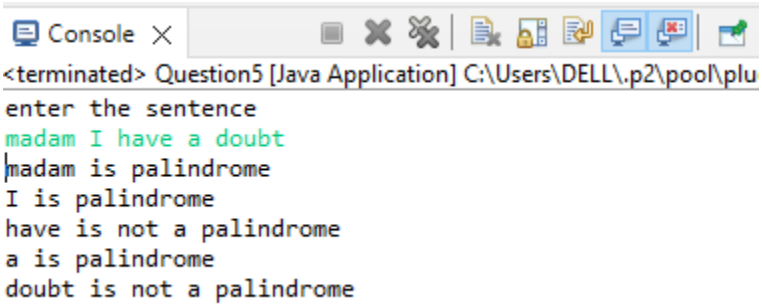


5. Write a program to take an input of a string with multiple words and convert it into a string array, and check if every element of that array is a Palindrome. Note: Palindrome is a word which when reversed also is the same.

Code:

```
import java.util.Scanner;
public class Question5 {
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(Question5.checkpalindrome(arr[i])) {
System.out.println(arr[i]+" is palindrome");
}
else
System.out.println(arr[i]+" is not a palindrome");
}
}
```

Output:


Console
<terminated> Question5 [Java Application] C:\Users\DELL\.p2\pool\plu
enter the sentence
madam I have a doubt
madam is palindrome
I is palindrome
have is not a palindrome
a is palindrome
doubt is not a palindrome