

(Day-13 afternoon session)

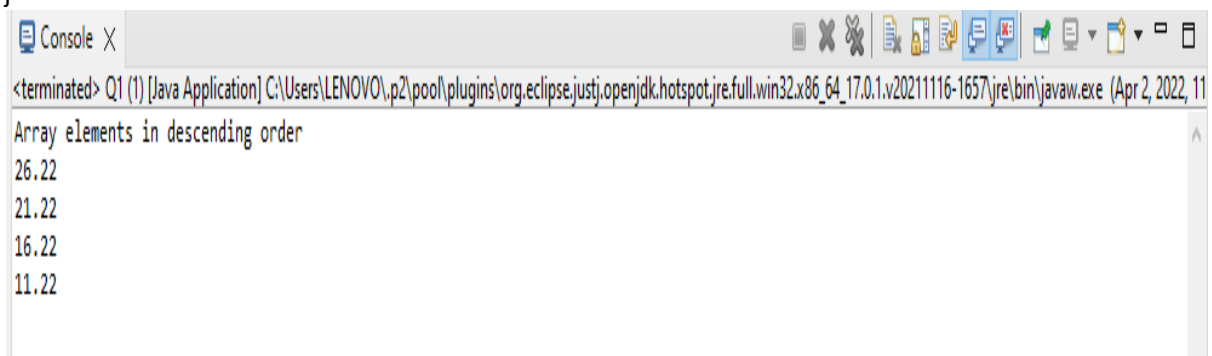
1. Write a program to create an ArrayList of double elements and add the elements.

Sort the elements in descending order and print it.

```
package SBA_1;

import java.util.ArrayList;
import java.util.Collections;
import java.util.List;

public class Q1 {
    public static void main(String[] args) {
        List<Double> list2 = new ArrayList<Double>();
        list2.add(21.22);
        list2.add(11.22);
        list2.add(16.22);
        list2.add(26.22);
        Collections.sort(list2, Collections.reverseOrder());
        System.out.println("Array elements in descending order");
        for(Double number: list2)
            System.out.println(number);
    }
}
```

A screenshot of a Java IDE's console window. The title bar shows 'Console X' and various icons. The text in the console reads: '<terminated> Q1 (1) [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (Apr 2, 2022, 11:00:00 AM)'. Below this, the output of the program is displayed: 'Array elements in descending order', followed by the numbers '26.22', '21.22', '16.22', and '11.22' on separate lines. A vertical scrollbar is visible on the right side of the console window.

```
<terminated> Q1 (1) [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (Apr 2, 2022, 11:00:00 AM)
Array elements in descending order
26.22
21.22
16.22
11.22
```

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

```
package SBA_1;

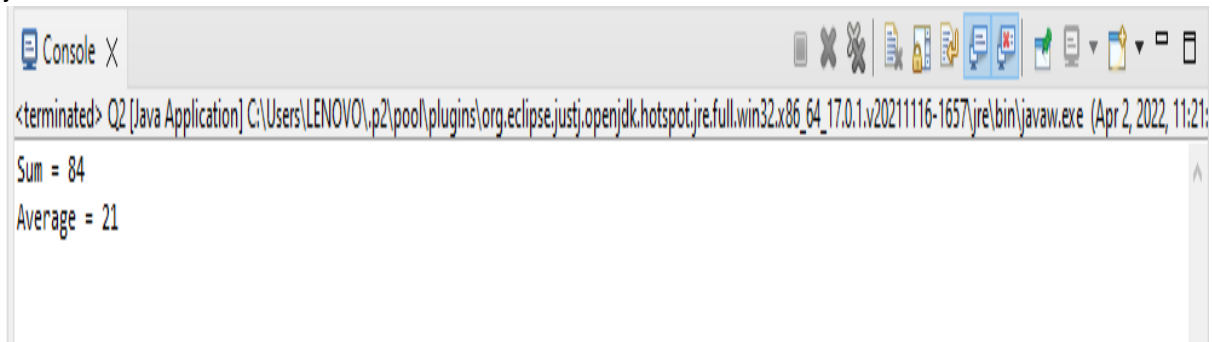
import java.util.ArrayList;
import java.util.List;

public class Q2 {
    public static void main(String[] args) {
        List<Integer> list = new ArrayList<Integer>();
```

```

        list.add(21);
        list.add(11);
        list.add(51);
        list.add(1);
        int sum=0;
        for(int i:list)
            sum=sum+i;
        System.out.println("Sum = "+sum);
        int avg=sum/list.size();
        System.out.println("Average = "+avg);
    }
}

```



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

```
package SBA_1;
```

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

```

public class Q3 {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter number of students");
        int n=sc.nextInt();
        ArrayList<String> first_name=new ArrayList<String>();
        ArrayList<String> second_name=new ArrayList<String>();
        for(int i=1;i<=n;i++)
        {
            System.out.println("Enter first name of student no."+i);
            first_name.add(sc.next());
            System.out.println("Enter second name of student no."+i);
            second_name.add(sc.next());
        }
    }
}

```

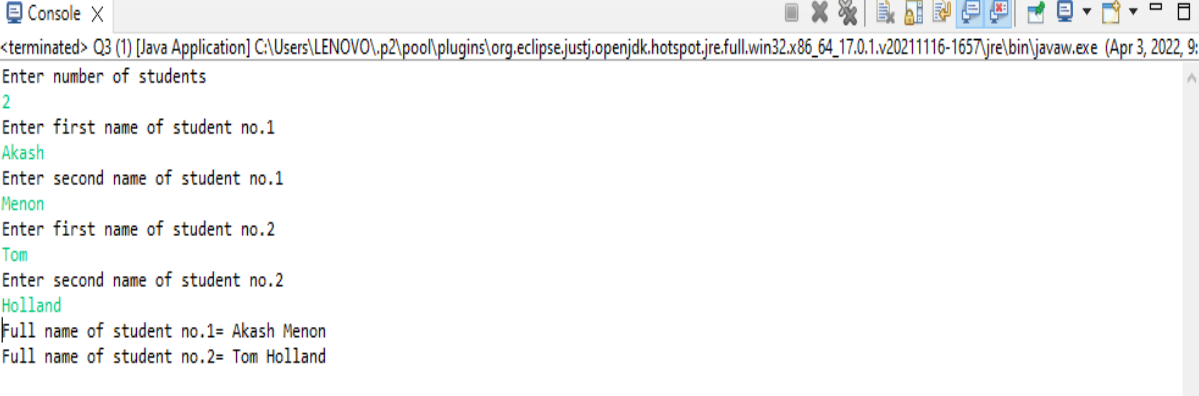
```

        for(int i=0;i<n;i++)
        {
            System.out.println("Full name of student no."+(i+1)+"=
"+first_name.get(i)+" "+second_name.get(i));
        }

    }

}

```



```

<terminated> Q3 (1) [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (Apr 3, 2022, 9:
Enter number of students
2
Enter first name of student no.1
Akash
Enter second name of student no.1
Menon
Enter first name of student no.2
Tom
Enter second name of student no.2
Holland
Full name of student no.1= Akash Menon
Full name of student no.2= Tom Holland

```

(day-8 assignment)

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.

```
package SBA_1;
```

```
import java.util.Scanner;
```

```

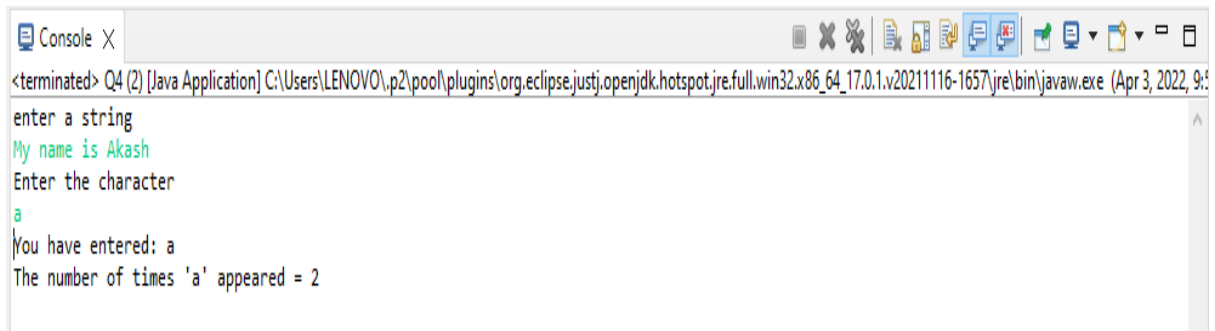
public class Q4 {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println("enter a string");
        String s1=sc.nextLine();
        System.out.println("Enter the character");
        char ch=sc.next().charAt(0);
        System.out.println("You have entered: "+ch);
        int count=0;
        for(int i=0;i<s1.length();i++)
        {
            if(s1.charAt(i)==ch)
                count++;
        }
    }
}

```

```

    }
    if (count==0)
        System.out.println("Character is not found");
    else
        System.out.println("The number of times '"+ch+"' appeared = 
"+count);
    }
}

```



```

<terminated> Q4 (2) [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (Apr 3, 2022, 9:
enter a string
My name is Akash
Enter the character
a
You have entered: a
The number of times 'a' appeared = 2

```

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.

```

package SBA_1;

import java.util.Scanner;

public class Q5 {

    public static void main(String[] args) {

        System.out.println("Enter a String");

        Scanner sc=new Scanner(System.in);

        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))

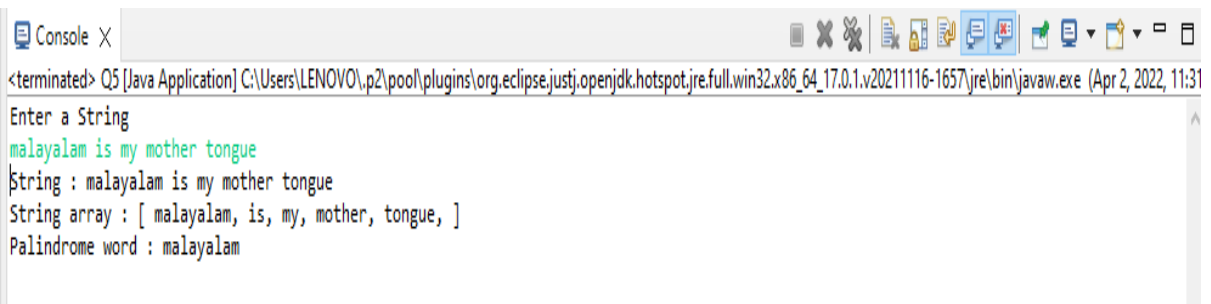
    {

        B System.out.println("Palindrome word : "+word);

    }

} } }

```



The screenshot shows a Java IDE console window with the following output:

```

<terminated> Q5 [Java Application] C:\Users\LENOVO\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (Apr 2, 2022, 11:31
Enter a String
malayalam is my mother tongue
String : malayalam is my mother tongue
String array : [ malayalam, is, my, mother, tongue, ]
Palindrome word : malayalam

```