

(Day-13 afternoon session)

1. Write a program to create a arraylist 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 SBA1_1 {
    public static void main(String[] args) {
        ArrayList<Double>list =new ArrayList<Double>();
        list.add(36.50);
        list.add(19.10);
        list.add(58.88);
        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 [Java Application] C:\Users\elija\Downloads\eclipse-jee-2022-03-R-win32-x86_64\ekli
The array list of double elements :[1.5, 2.0, 5.8, 10.2]
The decending order
10.2
5.8
2.0
1.5
```

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

**//code**

```
import java.util.*;

public class SBA1_2 {

    public static void main(String[] args) {

        List < Integer > list = new ArrayList < Integer > ();

        list.add(10);
        list.add(90);
        list.add(30);
        list.add(40);
        list.add(70);
        list.add(100);
        list.add(60);

        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();

        // Print the sum returned above
        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**

```
<terminated> Q2 [Java Application] C:\Users\elija\Downloads\eclipse-jee-2022-03-R-win32-x86
The elements in the arraylist is: [10, 8, 32, 54, 2]
sum of the elements is : 106
The average is : 21.0
```

3. Create two arraylist of strings to take First\_name and Last\_name of the students, and print their whole name.

//code

```
import java.util.*;
public class SBA1_3 {

    public static void main(String[] args) {

        List<String> firstName = new ArrayList<String>();
        List<String> lastName = new ArrayList<String>();
        String string1 = "CASTRO";
        firstName.add(string1);
        String string2 = "JOSEPH";
        firstName.add(string2);
        // /////inserting last name
        String string3 = "ROCKY";
        lastName.add(string3);
        String string4 = "ROBIN";
        lastName.add(string4);

        Iterator<String> iterator = firstName.iterator();
        Iterator<String> iterator1 = lastName.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

```
<terminated> Q3 [Java Application] C:\Users\elija\Downloads\eclipse-jee-2022-03-R-win32-x86_64\ec  
Enter the number of students  
3  
enter the first name of the student :1  
Elijah  
enter the second name of the student :1  
Joseph  
enter the first name of the student :2  
Thomas  
enter the second name of the student :2  
Chandy  
enter the first name of the student :3  
Augustine  
enter the second name of the student :3  
Saji  
full name1::Elijah Joseph  
full name2::Thomas Chandy  
full name3::Augustine Saji
```

(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.

//code

```
import java.util.*;  
public class SBA1_4 {  
  
    public static void main(String[] args) {  
  
        Scanner sc=new Scanner(System.in);  
        String s1;  
        int count =0;  
        System.out.println(" Enter the string");  
        s1=sc.nextLine();  
        //s1=s1.replace(" ", "");  
        System.out.println("Enter the element to be searched with  
count");  
  
        char c = sc.next().charAt(0);  
        for(int i=0;i<s1.length();i++)  
        {  
            if(s1.charAt(i)==c)  
                count++;  
        }  
        System.out.println(" "+c+" appears "+count+" times");  
    }  
}
```

```
    }  
}
```

//output

```
<terminated> Q4 [Java Application] C:\Users\elija\Downloads\eclipse-j  
Enter the string  
Elijahjoseph  
Enter the character  
j  
You have entered: j  
The Character 'j' appears 2 times.
```

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 SBA1_5 {
    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(SBA1_5.checkpalindrome(arr[i])) {
                System.out.println(arr[i]+" is palindrome");
            }
            else
                System.out.println(arr[i]+" is not a palindrome");
    }
}
```

```
}
```

```
//output
```

```
<terminated> Q5 [Java Application] C:\Users\elija\Downloa
```

```
Enter a string
```

```
AJA JAS KAJ
```

```
|string: AJA JAS KAJ
```

```
String array : [AJA ,JAS ,KAJ ,]
```

```
palindrome word :AJA
```