java Lab 1

```
package demo;
import java.util.Arrays;
public class SortArrayOfString {

	public static void main(String[] args) {
		String[] arr= {"now","is","the","time","good"};
		System.out.println("The Orginal Array:"+Arrays.toString(arr));
		for(int i=0;i<arr.length;i++) {
			for(int j=i+1;j<arr.length;j++) {
				if(arr[i].compareTo(arr[j+1])>0) {
					String temp=arr[j];
					arr[j]=arr[j+1];
					arr[j+1]=temp;
				}
			}
		}
		System.out.println("The Sorted Array:"+Arrays.toString(arr));

	}

}
```

java Lab 2

```
package demo;


import java.util.Scanner;
public class OccurenceOfCharacter {
    public static void main(String[] args) {
        Scanner a=new Scanner(System.in);
        int[] count=new int[256];
        String s=a.nextLine().replaceAll("\\s","");
        for(int i=0;i<s.length();i++){
            count[(int)s.charAt(i)]++;


        }
        for(int i=0;i<count.length;i++){
            if(count[i]!=0){
                System.out.println((char)i+":"+count[i]);
            }
        }
        a.close();
    }


}
```

java Lab 3

```
package demo;
import java.util.Scanner;
import java.util.ArrayList;
public class Lab_java{
    static ArrayList<String> a=new ArrayList<String>();
    static Scanner s=new Scanner(System.in);
    public static void main(String[] args){
       add();
       insert();
       search();
       startwith();
    }
    public static void add(){
        System.out.println("Enter the element to add:");
        String ad=s.next();
        a.add(ad);
        System.out.println(a);
    }
    public static void insert(){
        System.out.println("Enter the position to insert");
        int p=s.nextInt();
        System.out.println("Enter the element to insert");
        String el=s.next();
        a.add(p,el);
        System.out.println(a);
```

```
    }
    public static void search(){
        System.out.println("Enter the element to search");
        String se=s.next();
        int i=a.indexOf(se);
        if(i>-1)
            System.out.println("The element:"+ se+" found at index:"+i);
        else
            System.out.println("The element "+se+"not found in list");
    }
    public static void startwith(){
        System.out.println("Enter the letter to search all string");
        String l=s.next();
        for(String i:a){
            if(i.startsWith(l))
            System.out.println(i);
        }
    }
}
```

[02-09-2024 19:29] Deepak NCET: java Lab 4

```
package demo;

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

```
public class Lab_java {

    public static void main(String[] args) {

        ArrayList<String> namesList = new ArrayList<String>();
        Scanner scanner = new Scanner(System.in);



        for (int i = 1; i <= 3; i++) {
            System.out.print("Enter name " + i + ": ");
            String name = scanner.nextLine();
            namesList.add(name);
        }



        System.out.println("Number of elements in the ArrayList: " + namesList.size());



        for (int i = 4; i <= 5; i++) {
            System.out.print("Enter name " + i + ": ");
            String name = scanner.nextLine();
            namesList.add(name);
        }



        System.out.println("Number of elements in the updated ArrayList: " + namesList.size());
```

```
        System.out.println("Names in the ArrayList:");
        for (String name : namesList) {
            System.out.println(name);
        }
        System.out.print("Enter a name to remove: ");
        String nameToRemove = scanner.nextLine();

        if (namesList.remove(nameToRemove)) {
            System.out.println("Name removed successfully.");
        } else {
            System.out.println("Name not found in the list.");
        }



        System.out.println("Names in the updated ArrayList:");
        for (String name : namesList) {
            System.out.println(name);
        }



        scanner.close();
    }
}
```

\ java Lab 5

```
package demo;
import java.util.ArrayList;
import java.util.Scanner;
public class Lab_5 {
    public static void main(String[] args) {
        Scanner s=new Scanner(System.in);
        ArrayList<String> a=new ArrayList<>();
        a.add(0,"Element 1");
        a.add(0,"Element 2");
        a.add("Element 3");
        a.add("Element 4");
        System.out.println("List before removal:"+a);
        System.out.println("The fist element  of List:"+a.remove(0));
        System.out.println("The last element  of List:"+a.remove(a.size()-1));
        System.out.println("List after remove:"+a);
        s.close();
    }
}
```

java Lab 6

```
package demo;
import java.util.ArrayList;
import java.util.Arrays;
import java.util.Iterator;
import java.util.ListIterator;
public class Lab_6 {
    public static void main(String[] args) {
ArrayList<Integer> a = new ArrayList<>(Arrays.asList(1, 2, 3, 4));
    Iterator<Integer> i=a.iterator();
    System.out.println("Using Iteration");
    while (i.hasNext())
        System.err.println(i.next());
    ListIterator<Integer> l=a.listIterator();
    System.out.println("Using List Iteration");
    while(l.hasNext())
        System.out.println(l.next());
    System.out.println("Reversed List");
    while (l.hasPrevious())
        System.out.println(l.previous());
    }

}
```

java Lab 7

```
package demo;
import java.io.FileWriter;
import java.io.BufferedWriter;
import java.io.BufferedReader;
import java.io.FileReader;
import java.io.IOException;
public class Lab_7{
public static void main(String[] args){
        String file1="C:\\Users\\deepa\\OneDrive\\Desktop\\d1.txt";
        String file2="C:\\Users\\deepa\\OneDrive\\Desktop\\d2.txt";
        String Output="C:\\Users\\deepa\\OneDrive\\Desktop\\d3.txt";
   try{
        BufferedReader buffer1=new BufferedReader(new FileReader(file1));
      String data1="";
      String line;
      while((line=buffer1.readLine())!=null){
         data1+=line+"\n";
      }
      buffer1.close();
      BufferedReader buffer2=new BufferedReader(new FileReader(file2));
      String data2="";
      String line1;
      while((line1=buffer2.readLine())!=null){
      data2+=line1+"\n";

      }
```

```
        buffer2.close();
        String merge=data1+data2;
        BufferedWriter writebuffer=new BufferedWriter(new FileWriter(Output));
        writebuffer.write(merge);
        writebuffer.close();
        System.out.println("Merged data written to "+Output);
        System.out.println("Content of the file:");
        BufferedReader mergeBuffer=new BufferedReader(new FileReader(Output));
        String line3;
        while((line3=mergeBuffer.readLine()) != null){
        System.out.println(line3);
        }
        mergeBuffer.close();
        }
         catch(IOException e){
              e.printStackTrace();
}
}
}
```

: java Lab 8

```
package demo;


import java.io.ByteArrayInputStream;
import java.io.ByteArrayOutputStream;
import java.io.IOException;
import java.util.Scanner;
```

```
public class Pratice {


    public static void main(String[] args) {
        // Read a string from the user
        String userInput = getUserInput();


        // Write the string to a byte array
        byte[] byteArray = writeToByteArray(userInput);


        // Read from the byte array and display the content
        readAndDisplayFromByteArray(byteArray);
    }
    private static String getUserInput() {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a string: ");
        return scanner.nextLine();


    }
    private static byte[] writeToByteArray(String inputString) {
        try (ByteArrayOutputStream byteArrayOutputStream = new ByteArrayOutputStream())
{
            byte[] bytes = inputString.getBytes();
            byteArrayOutputStream.write(bytes);
            System.out.println("String has been written to the byte array.");
            return byteArrayOutputStream.toByteArray();
        } catch (IOException e) {
            System.out.println("An error occurred while writing to the byte array: " +
e.getMessage());
```

```
            return new byte[0];
        }
    }
    private static void readAndDisplayFromByteArray(byte[] byteArray) {
        try (ByteArrayInputStream byteArrayInputStream = new
ByteArrayInputStream(byteArray)) {
            byte[] buffer = new byte[1024];
            int bytesRead = byteArrayInputStream.read(buffer);
            String content = new String(buffer, 0, bytesRead);
            System.out.println("Content read from the byte array: " + content);
        } catch (IOException e) {
            System.out.println("An error occurred while reading from the byte array: " +
e.getMessage());
        }
    }
}
```