Assessment-4

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Lab Assessment-9

Q)

    import java.io.*;
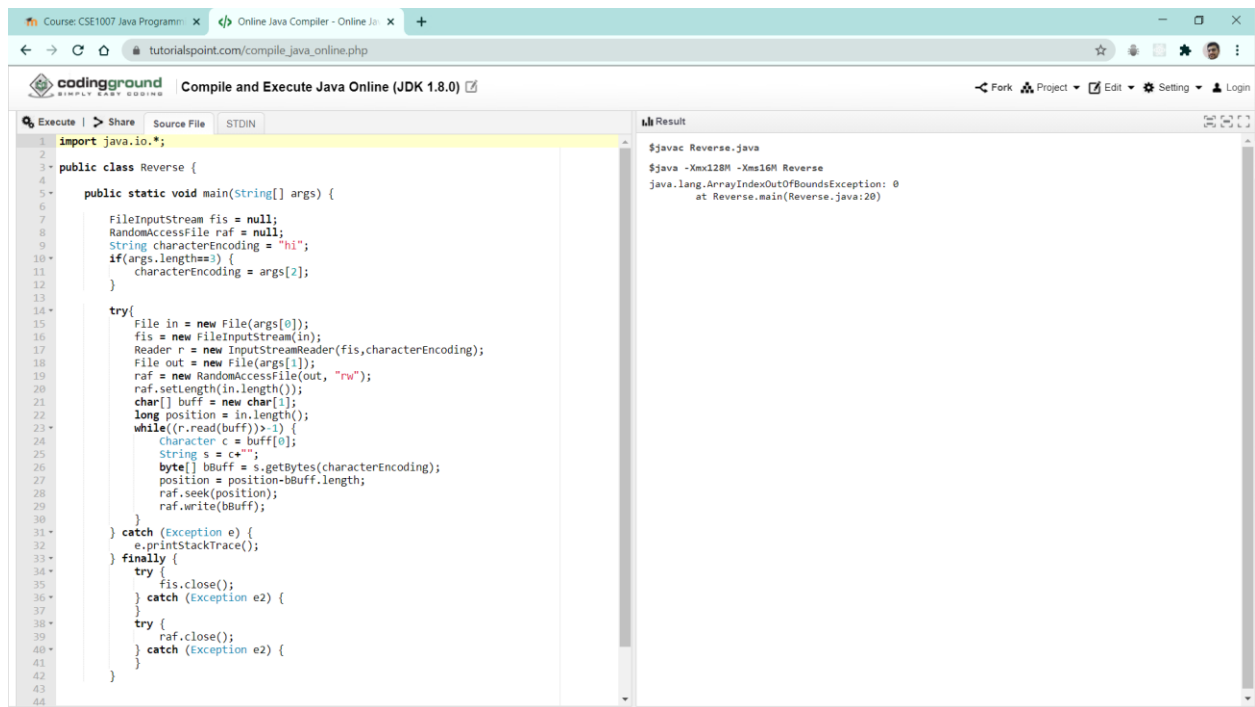

public class Reverse {

```java
public static void main(String[] args) {

    FileInputStream fis = null;

    RandomAccessFile raf = null;

    String characterEncoding = "hi";

    if(args.length==3) {

        characterEncoding = args[2];

    }

    try{

        File in = new File(args[0]);

        fis = new FileInputStream(in);

        Reader r = new
InputStreamReader(fis,characterEncoding);
```

```java
File out = new File(args[1]);
raf = new RandomAccessFile(out, "rw");

raf.setLength(in.length());
char[] buff = new char[1];
long position = in.length();
while((r.read(buff))>-1) {
    Character c = buff[0];
    String s = c+"";
    byte[] bBuff = s.getBytes(characterEncoding);
    position = position-bBuff.length;
    raf.seek(position);
    raf.write(bBuff);
```

```java
            }
        } catch (Exception e) {
            e.printStackTrace();
        } finally {
            try {
                fis.close();
            } catch (Exception e2) {
            }
            try {
                raf.close();
            } catch (Exception e2) {
            }
        }
    }
```

}

Q)

```java
    import java.util.*;
import java.io.*;
 public class Exercise58 {
    public static void main(String[] args){
      Scanner in = new Scanner(System.in);
```

```java
        System.out.print("Input a Sentence: ");
        String line = in.nextLine();
        String upper_case_line = "";
        Scanner lineScan = new Scanner(line);
        while(lineScan.hasNext()) {
            String word = lineScan.next();
            upper_case_line +=
Character.toUpperCase(word.charAt(0)) +
word.substring(1) + " ";
        }

System.out.println(upper_case_line.trim());
    }
}
```

Q)

```java
    import java.util.Scanner;
import java.io.*;

public class LowercaseFileConverter2
{
    public static void main(String[]
args)throws IOException
    {
        String filename;
        String message;
        String filename2;
```

```java
Scanner keyboard = new Scanner(System.in);

System.out.print("Enter the filename: ");
filename = keyboard.nextLine();

FileWriter fwriter = new FileWriter(filename);
PrintWriter outputFile = new PrintWriter(fwriter);
```

```java
        System.out.println("Enter a message: ");

        message = keyboard.nextLine();



        outputFile.println(message);




        outputFile.close();


        System.out.println("Enter the name of the second file: ");

        filename2 = keyboard.nextLine();
```

```java
FileReader freader = new
FileReader(filename2);

BufferedReader inputFile = new
BufferedReader(freader);

String str;



str = inputFile.readLine();



while (str != null)
{
```

```java
            System.out.println(str);

            String upper =
message.toLowerCase();

                str = inputFile.readLine(lower);

        }


        inputFile.close();

    }

}


Q)

    import java.io.*;

public class Tester {
```

```java
    private static final String FILE_PATH =
"data.txt";

    public static void main(String args[])
throws IOException {

        FileUtil fileUtil = new
FileUtil(FILE_PATH);

        System.out.println("No. of characters in
file: " + fileUtil.getCharCount());

    }
}


class FileUtil {

    static BufferedReader reader = null;
```

```java
    public FileUtil(String filePath) throws
FileNotFoundException {

        File file = new File(filePath);

        FileInputStream fileStream = new
FileInputStream(file);

        InputStreamReader input = new
InputStreamReader(fileStream);

        reader = new BufferedReader(input);
    }


    public static int getCharCount() throws
IOException {

        int charCount = 0;

        String data;

        while((data = reader.readLine()) != null) {
```

```java
        charCount += data.length();
    }

  return charCount;

 }

}


Q)

   import java.io.*;


public class FileMerge

{

  public static void main(String[] args)
throws IOException

  {
```

```java
// PrintWriter object for file3.txt
PrintWriter pw = new
PrintWriter("file3.txt");

// BufferedReader object for file1.txt
BufferedReader br = new
BufferedReader(new
FileReader("file1.txt"));

String line = br.readLine();

// loop to copy each line of
// file1.txt to  file3.txt
while (line != null)
```

```java
    {
        pw.println(line);

        line = br.readLine();

    }


    br = new BufferedReader(new
FileReader("file2.txt"));


    line = br.readLine();


    // loop to copy each line of

    // file2.txt to  file3.txt

    while(line != null)

    {
```

```java
        pw.println(line);

        line = br.readLine();
    }

    pw.flush();

    // closing resources
    br.close();

    pw.close();

    System.out.println("Merged file1.txt
and file2.txt into file3.txt");
    }
}
```

Lab Assessment-10

Q)

```java
import java.util.*;


class Student {

    String name;

    String stu_id;

    int score;

    public Student() {

        this(" ", " ", 0);

    }

    public Student(String initName, String initId,
int initScore) {
```

```java
        name = initName;

        stu_id = initId;

        score = initScore;

    }

}


public class Main {

    public static void main(String[] args) {

        Scanner in = new Scanner(System.in);

        System.out.println("Input number of students:");

        int n = Integer.parseInt(in.nextLine().trim());

        System.out.println("Input Student Name, ID, Score:");
```

```java
Student stu = new Student();

Student max = new Student();

Student min = new Student(" ", " ",
100);

for (int i = 0; i < n; i ++) {

    stu.name = in.next();

    stu.stu_id = in.next();

    stu.score = in.nextInt();

    if (max.score < stu.score) {

        max.name = stu.name;

        max.stu_id = stu.stu_id;

        max.score = stu.score;

    }

    if (min.score > stu.score) {

        min.name = stu.name;
```

```java
                    min.stu_id = stu.stu_id;

                    min.score = stu.score;

            }

        }

        System.out.println("name, ID of the highest score and the lowest score:");

        System.out.println(max.name + " " + max.stu_id);

        System.out.println(min.name + " " + min.stu_id);

        in.close();

    }
}
```
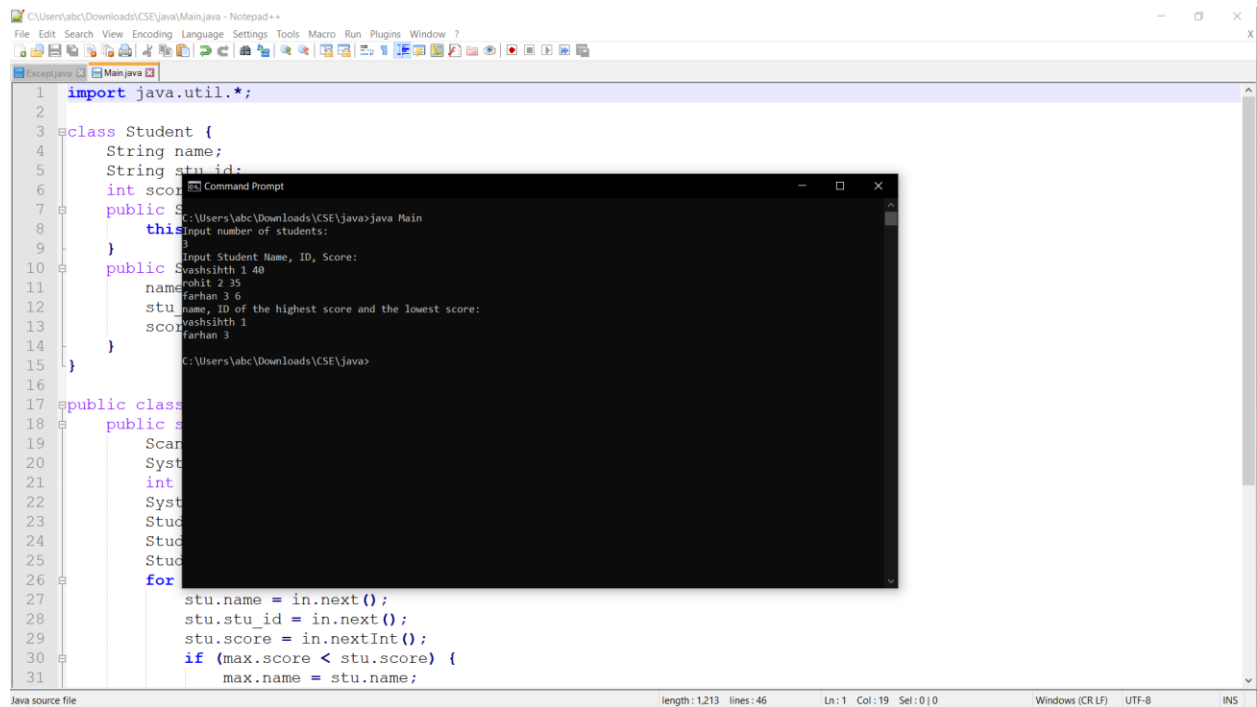
Notepad++ — C:\Users\abc\Downloads\CSE\java\Main.java

```java
import java.util.*;

class Student {
    String name;
    String stu_id;
    int scor...
    public S...
        this...
    }
    public S...
        name...
        stu_...
        scor...
    }
}

public class...
    public s...
        Scan...
        Syst...
        int...
        Syst...
        Stud...
        Stud...
        Stud...
        for...
            stu.name = in.next();
            stu.stu_id = in.next();
            stu.score = in.nextInt();
            if (max.score < stu.score) {
                max.name = stu.name;
```

Command Prompt:

```
C:\Users\abc\Downloads\CSE\java>java Main
Input number of students:
3
Input Student Name, ID, Score:
vashsihth 1 40
rohit 2 35
farhan 3 6
name, ID of the highest score and the lowest score:
vashsihth 1
farhan 3

C:\Users\abc\Downloads\CSE\java>
```

Q)

```java
    package serializationdemo;

import java.io.*;

public class EmployeeSerialDemo {

    public static void main(String[] args) {

        Employee c = new Employee("Suresh", "E123"); // 2

        File outFile =  new File("empSerial.ser");
```

```java
        try {

                FileOutputStream fs = new
FileOutputStream(outFile);

                ObjectOutputStream os = new
ObjectOutputStream(fs);

                os.writeObject(c); // 3

                os.close();

        } catch (Exception e) {

                e.printStackTrace();

        }

    }
}
```

Lab Assessment-11

Q)

```java
    import java.sql.*;
class question1 {
    private static String user ="root";
    private static String password = "root";
    private static Connection con=null;
    private static Statement st=null;
    private static ResultSet rs=null;
    public static void main(String args[])throws Exception {
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```java
con=DriverManager.getConnection("jdbc:mysql://lo
calhost", user, password);

        System.out.println("Success");

    }

    catch (Exception e) {

        System.out.println(e);

    }

    try{

        st=con.createStatement();

        st.addBatch("CREATE DATABASE Faculty;");

        st.addBatch("USE Faculty;");

        st.addBatch("CREATE TABLE Faculty1(empid
VARCHAR(4),facultyname VARCHAR(15),DOB
DATE,Date_of_Joining DATE,designation
VARCHAR(20));");

        st.addBatch("INSERT INTO Faculty1 VALUES"+
```

```java
        "('E101','Ravi','1975-02-24','1992-04-
27','Associte Professor'),"+

        "('E102','Rahul','1975-02-24','1992-04-
27','Senior Professor'),"+

        "('E103','Raman','1975-02-24','1992-04-
27','Assistant Professor'),"+

        "('E104','Krishna','1975-02-24','1992-04-
27','Senior Professor'),"+

        "('E105','Raghav','1975-02-24','1992-04-
27','Head of Department');");

        st.executeBatch();



        rs=st.executeQuery("select * from
Faculty1;");
```

```java
		System.out.println("EmpID\tFaculty
Name\tDate Of Birth\tDate of Joining\t
Designation");

		while(rs.next())

System.out.println(rs.getString("empid")+"\t\t"+rs.g
etString("facultyname")+"\t\t"+rs.getString("DOB")
+"\t\t"+rs.getString("Date_of_Joining")+"\t\t"+rs.ge
tString("designation"));

		System.out.println("\n\n\n\n");

		rs=st.executeQuery(" select * from Faculty1
where designation='Senior Professor'; ");
```

```java
            System.out.println("EmpID\tFaculty
Name\tDate Of Birth\tDate of Joining\t
Designation");

            while(rs.next())


System.out.println(rs.getString("empid")+"\t\t"+rs.g
etString("facultyname")+"\t\t"+rs.getString("DOB")
+"\t\t"+rs.getString("Date_of_Joining")+"\t\t"+rs.ge
tString("designation"));


        }
        finally {
            try {
                if (rs != null) rs.close();

                if (st != null) st.close();

                if (con != null) con.close();

            }
```

```java
        catch (SQLException e){

            System.out.println(e);

        }

    }

  }

}
```

Lab Assessment-12

Q)

Index.html

Name: [   ]

Password: [   ]

[submit]

Index.java

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class Validate extends HttpServlet {
 protected void doPost(HttpServletRequest request,
HttpServletResponse response)
 throws ServletException, IOException {
 response.setContentType("text/html;charset=UTF-8");
 PrintWriter out = response.getWriter();
 try {
 String name = request.getParameter("user");
 String password = request.getParameter("pass");
 if(password.equals("studytonight"))
 {
 RequestDispatcher rd =
request.getRequestDispatcher("Welcome");
 rd.forward(request, response);
 }
```

```
else
{
out.println("<font color='red'><b>You have entered
incorrect password</b></font>");
 RequestDispatcher rd =
request.getRequestDispatcher("index.html");
 rd.include(request, response);
}
}finally {
out.close();
}
```

Home.java

```
import java.io.*;
 import javax.servlet.*;
 import javax.servlet.http.*;
 public class Welcome extends HttpServlet { protected
void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException,
IOException {
response.setContentType("text/html;charset=UTF-8");
 PrintWriter out = response.getWriter();
 try { out.println("
```

Welcome user

"); } finally { out.close(); } } }

<u>Web.xml</u>

Validate Validate Welcome Welcome Validate /Validate Welcome /Welcome index.html