Web programming — A. Satya Anusha

Mid-1 Assignment — 18WH1A1201

(1) Write a program to find factorial value of any number entered by the user. Using Java script.

(A)

```
<html>
<head>
<script>
function show(){
    var i, no, fact;
    fact=1;
    no = Number(document.getElementById("num").value);
    for(i=1; i<no; i++){
        fact= fact*i;
    }
document.getElementById("answer").value =fact;
</script>
</head>
<body>
Enter num: <input id="num">
<button onclick="show()"> factorial </button>
<input id="answer">
</body>
</html>
```

Output:-

Enter num: 5

Factorial 120.

(2) In a company an employee is paid as under. If his basic salary is less than Rs1500 then HRA = 10% of basic salary & DA = 90% of salary. If his salary is either equal to or above Rs 1500 then HRA = Rs 500 & DA = 98% of basic salary. If the employee's salary is input, write the program to find their gross salary, using javascript eventhandlers.

(A) Program:-

```
<html>
<head>
<script>
function show(){
    var no, ans;
```

```
no = Number( document.getElementById("salary").value);
    if(no<1500) {
        ans = no+( (10/100) * no) + ( (90/100) * no);
    }
    else {
        ans = no + ( 500+( ( 98/100 ) * no);
    }
document.getElementById('answer").value = ans;
}
</script>
<head>
<body>
Enter salary : <input id = "salary">
<button onclick = "show() "> Gross salary </button>
<input id = "answer">
</body>
</html>
```

Output:

Enter salary 1203

Gross salary 20383.8

(3) Write a program to take a character (c) as input and check whether the given character is a vowel or consonant using java.

(A)

```
class Solution {
    Public static Void main (String[] args) {
        Scanner sc = new scanner( System.in);
        Character c = sc.next();
        if ( c == "A' || c == "E" || c == 'I" || c == "O" ||
                                                c == "U" ) {
            System.out.println("vowel");
        }else {
            System.out.println( "consonant");
        }
    }
}
```

Output1:

2
consonant

Output2:

A
Vowel.

(4) Describe indetail multithreading concept. Illustrate with the java code.

(A) Multithreading in java allows concurrent execution of two or more parts of a program for maximum utilization of CPU Each part of such program is called a thread. So, threads are light-weight processes within a process.

Program:

```
Class Multithreading Demo extends Thread {
    Public void run() {
        try {
            System.out.println ("Thread " + Thread.currentThread().
            getId() + " is running");
        } catch ( Exception e) {
            System.out.println( "Exception is caught");
            }
    }
}
Public class Multithread {
    Public static void main(String[] args) {
        int n=4;
        for(int i=0; i<n;i++) {
            MultithreadingDemo object = new
                                        MultithreadingDemo();
            object.start();
            }
        }
    }
```

Output:

```
Thread 4 is running
Thread 5 is running
Thread 6 is running
Thread 7 is running.
```

(5) Connect to the database using any of the JDBC drivers. Insert and display 2 records with bus ticket reservation information.

(A)

```
import java.sql.*;
Public class Solution {
    Public static void main(String[] args) {
        Connection con = null;
        Statement stmt = null;
```

P70

```
try {
Class.forName("com.mysql.jdbc.Driver");
  Con = DriverManager.getConnection("jdbc:mysql://localhost/lab
                                    "root", "1234");
System.out.println("connection established");
   Stmt = con.createstatement();
String sql = "Insert into booking" + "values(130, "Hyderabad", "chennai",
      "2021-01-12", "19:30:10", "2021-01-13" 19:30:10",
                                  4, "Lesson1", 38);
   Stmt.executeUpdate(sql);
    sql = "Insert into booking" +
          "values(13), "Hyderabad", "Banglore", "2021-01-13",
              "2021-01-13 19:10:00", "2021-01-14 08:30:10",
                                  5, "Person2", 40);
    Stmt.executeUpdate(sql);
System.out.println("two records has been succesfully inserted");
          sql = "select * from booking";
       Result_set rs = Stmt.executeQuery(sql);
while(rs.next()) {
    System.out.println("Ticketno: " + rs.getInt("ticketno"));
    System.out.println("Source:" + rs.getString("Source"));
    System.out.println("Destination:" + (rs.getString("destination");
    System.out.println("DOJ :" + (rs.getData("doj").toString());
System.out.println("Departure :" + (rs.getTimestamp(departure).toString());
System.out.println("Arrival :" + (rs.getTimestamp("arival")).toString());
System.out.println("Seatno: " + rs.getInt("Seatno"));
System.out.println("name: " + rs.getstring("name"));
System.out.println("age:" + rs.getInt(age));
 System.out.println("\n");
 }
  con.close();
 } catch(exception e) {
        e.printStackTrace();
         } } }
```

Output:

Connection established.

two records has been successfully inserted

Ticket no: 130

Source: Hyderabad

Destination: chennai

DOJ: 2021-01-12.

Departure: 2021-01-12 19:30:10.

Arival: 2021-01-13 19:30:10.

seat no: 4

Name: Person 1

Age: 38

Ticket no: 131

Source: Hyderabad.

Destination: Banglore

DOJ: 2021-01-13.

Departure: 2021-01-13 19:10:00

Arival: 2021-01-14 08:30:10.

seat no: 5

Name: Person 2

Age: 40