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Web Programming Assignment-1

1. Write a program to find factorial value of any numbers entered by the user. Using javascript.

```
<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 Rs. 1000 then HRA = 10% of the salary and DA = 90% of salary. If his salary is either equal to or above Rs. 1500, then HRA = Rs. 500 and DA = 98% of his basic salary. If the employee's salary is input, write the program to find his gross salary. Using javascript eventhandler.

```
<html>
<body>
<h1>The Employee Salary</h1>
    Onsubmit
```

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 20383.16

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

```
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");
    }
}
```

Output 1:
Z
Consonant

Output 2:
E
Vowel

4. Describe in detail multithreading concept illustrate with the java code.

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

Pgm:

```
class MultiThreadingDemo 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 obj = new MultiThreadingDemo();
            obj.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.

```
import java.sql.*;
public class Solution {
    public static void main(String args[]) {
        Connection con = null;
        Statement stmt = null;
    try {
     class.forName("com.mysql.jdbc.Driver");
     con = DriverManager.getConnection("jdbc:mysql://localhost:3306/Bus",
                                       "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,"Person1",38);
     stmt.executeUpdate(sql);
     sql = "Insert into booking" + values(131,"Hyderabad","Banglore",
           "2021-01-13","2021-01-13 19:10:00","2021-01-14 08:30:10",
                                  5,"Per2",40);
     Stmt.executeUpdate(sql);
     sql = "select * from booking";
     Resultset 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.getDate("doj").toString());
        System.out.println("Departure:" + (rs.getTimeStamp(departure).
                                          toString());
     System.out.println("Arrival" + (rs.getTimeStamp(arrival).toString());
     System.out.println("seat no:" + 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 inserted successfully

Ticket no: 130
Source: Hyderabad
Destination: Chennai
DOJ: 2021-01-12
Departure: 2021-01-12 19:30:10
Arrival: 2021-01-13 19:30:10
Seat no: 4
Name: Person1
Age: 38

Ticket no: 131
Source: Hyderabad
Destination: Banglore
DOJ: 2021-01-13
Departure: 2021-01-13 19:10:00
Arrival: 2021-01-14 08:30:10
Seat no: 5
Name: Per2
Age: 40