

- 1) Write a program to find factorial value of any number 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 :

- 2) In a company an employee is paid as under : If his base salary is less than Rs 100 then HRA = 10% of base salary & DA = 95% of base salary. If the salary is either

equal to or above Rs 1500, then HRA = Rs 500 & DA = 95% of basic salary.
If the employee's salary is input, write the program to find the gross salary using javascript event handler.

```
<html>
<head>
<script>
function show() {
    var no, ans;
    no = Number(document.getElementById("salary").value);

    if (no < 1500) {
        ans = no + ((10/100) * no) + ((95/100) * no);
    } else {
        ans = no + 500 + ((95/100) * no);
    }
    document.getElementById("answer").value = ans;
}
</script>
<head>
<body>
EnterSalary: <input id="salary" type="text">;
<button onclick="show()"> Gross Salary </button>
<input id="answer" type="text">
</body>
</html>
```

Output :-

EnterSalary 1205

Gross Salary 20383.16

3. Write a program to take a character as input & check whether the given character is a vowel or 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:-

Z: Consonant

A: Vowel

4. Describe in detail multithreading with java code.

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 thread.

Program:-

```

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 database using any of the JDBC driver. Insert & display 2 records with the busticket.

```

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/Busticket",
                "root", "1234");
        }
    }
}

```

(3)

```

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', 5, 'person', 40);

stmt.executeUpdate(sql);
sql = "Insert into booking values (131, 'Hyd', 'Bangalore', '2021-01-13 19:10:00',
    '2021-01-14 08:30:10', 5, 'person', 40);

stmt.executeUpdate(sql);
System.out.print("two records has been successfully inserted");

sql = "select * from booking";
ResultSet rs = stmt.executeQuery(sql);
while(rs.next()) {
    System.out.println("Ticket no:" + rs.getInt("ticketno"));
    System.out.println("Source" + rs.getString("source");
    System.out.println("Destination" + rs.getString("destination").toString());
    System.out.println("Departure:" + rs.getTimestamp("departure").toString());
}
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

Arrival : 2021-01-13 19:30:10

SeatNo : 4

Name : person1

Age : 35