① Write a program to find factorial value of any numbers 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]

④ Describe in detail 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 thread are light-weight process 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 ("Exeption is caught");
        }
    }
}

public class MultiThread {
    public static void main (String [] args) {
        int n = 4;
        for (int i=0; i<n; i++) {
            MultiThreading Demo.object = new Multithreading();
            object.start ();
        }
    }
}
```

Output:
Thread 4 is running.
Thread 5 is running.

Thread 6 is running
Thread 7 is running.

(2) In a company an employee is paid as under. If his bast. salary is less then RS 1500 then HRA = 10% of base salary. & DA = 90% of salary

If his salary is either equal to or above Rs 1500, then HP = 500 & PA = 98% of basic salary. If the Employee's. Salary is imact write the program to find his gross salary. using javascript ernthandles.

A

```html
<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]

factorial   20385.16

Enter salary [1203]

[gross salary]   [20383.16]

③ write a program to take a character (c) as i/p & check. whether the given character is a vowel / a

consonant. using java.

```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 ("consonent");
        }
    }
}
```

output1:   output 2;

Z   A

Consonant   vowel.

⑤ Connect to the database using any of the JDBC drives.
Insert & display 2 records with bus ticket reservation inforatio.

A.
```java
import java.sql.*;
public class solution {
    static public static void main (string [] args) {
        Connection con = null;
        Statement stmt = null;

        try {
            class.for Name (" com.mysql.pbe.Driver");
            com = DriverManager.get connection ("Jdbc:mysql://
            localhost/Bus "} "root", "1234");
            System.out.println ("convertion established);
            Stmt = con.creat statement ();
        String sql = "Insert into booking" +
            "values (130, "Hyderbad", "chennai", "2021-9-12";
```

```
    "19:30:10", "2021-01-13" 19:30:10", 4, "Person1", 38);
    Stmt.executeUpdate(sql);
    Sql = "Insert into booking"+ 'values (131, "Hyderabad", "Bangalore
        "2021-01-13", "2021-01-13', 19:10:00', "2020-01-14
    08:30:10", 5, "person2", 40);
Stmt.executeUpdate(sql);
System.out.println("two records has been successfull up
    inserted");
Sql = "select * from booking";
Result set rs = stml executeQuery(sql)
while(rs.next()){
System.out.println("Ticket no: "+ rs.get Int("ticketno));
System.out.println("Source:" + rs.get string("source)
System.out.println("Destination:" rs.get string("destination)}
System.out.println("DOJ: "+ (rs.get Date("doj)).tostring())],
S.o.pln("Departure:" + (rs.get Timestamp(departure)) to
                    string());
s.opln("Arrival;"+ (rs.get Timestamp("arrival)).tostring()]
S.o.pln("seat no:"+ rs.get Int("seat no"));
S.o.pln("name:" + rs.get string("name'));
S.o.pln("age:" + rs get Int("age));
S.o.pln("\n");
}
con.close();
}
catch(exception e){
    printStackTrace();
}
y
}
```

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 : Person 1

Age : 38

Ticket no : 131

Source : Hyderbad

Destination : Banglore

DoJ : 2021-01-13

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

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

seatno : 5

Name : Person2

Age : 40