1) Write a Program to find factorial Value of any numbers Enroled by the user 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, his basic Salary is less than Rs 1500 from HRA = 10% of base Salary & DA = 90% of Salary. If his Salary is Either Equal to or above Rs 1500, then HR = Rs 500 & DA = 95% of basic Salary.

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()"> GrossSalary</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 & Check whether the given
Character is vowel or Consonant.

A) Class Solution {

   Public Static Void main (String[] args) {

   Scanner sc = sc.next();

   if (CC=="A" || C=="E" || C=="I" || C=="o" ||
                                        C=="u") {

      System.out.Println("Vowel");

   }

   Else {

      System.out.Println("Consonant");

   }}}

Output: 1) Z

         Consonant

      2) A

         Vowel

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 thread.

Program :-

```
Class Multithreading Extends thread {
    Public Void main() {
        try {
            System.out.Println("thread"- + Thread.curr
                                              getID+ "is runni
        } Catch (Exception e) {
            System.out.Println("Exception is Caught")
        }}}
Public Class AMultithread {
    Public Static void main(string[] args) {
        int n=4;
        for (int i=0, i<n, i++) {
            Multithreading Demo.obsct = new Multithread
            Obsect.Start();
        }}}
```

Output:-

Thread 4 is running   Thread 6 is running

Thread 5 is running   T

5) Connect to the database using any of the JDBC drivers. Insert & display the records with bus ticket reservation system.

A) 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 | Bus | 'root', '123
        System.out.Println ("Connection Established');
        stmt = Con. Create Statement();
        String SL = " Insert into booking"+ "value (130, "Hyderabad"
                " Chennai", "2021-01-12", "19:30:10", 2021-01-13
                        4, "Person 1" 3 8),
        Stmt. ExecuteUpdate (sql);
        SqL = "Insert into booking" + " values (131, "Hyderabad",
                " banglore", "2021-01-13", "2021-01-13", "19:10:60", "2021-01-0
                08:30:108, 5, "Person 2", 40);
        Stmt. Execute update (sql);
        System.Out.Println ("4000 records has become
                        Sucessfully inserted");
        SqL = " Select * from booking";
        Resultset srs = Stmt.ExecuteQuery (sqL);
```

```java
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.getTimestamp("departure")
                            .toString());
    System.out.println("Arrival:" + rs.getTimestamp("arrival")
                            .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();
}}}
```

O/p:- Connection Established
Two records has be Sussessfully inserted
Ticket no:130
Source: Hyderabad
Destination: Chennai
DoJ: 2021-01-12
Depature: 2021-01-12 19:30:10
Arrival: 2021-01-13 19:30:10
Seat no :4
Name: Person1

Age: 38

Ticketno: 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: Person 2

Age: 40