List of Experiments: Web Technology Lab (CS792C)

1. Write a single html program through which you can explain -

a) anchor tag, b)'img' tag with 'src' attribute, c) paragraph, d) heading.

Program:

```
<html>
  <body>
    <h2>Click on the JISCE Logo...</h2>
    <p>It will redirect you to JISCE website</p>
    <a href="https://www.jiscollege.ac.in/"
      ><img
        src="https://www.jiscollege.ac.in/assets/images/logo.png"
        alt="jisce"
    /></a>
  </body>
</html>
```

Output:

2. Write a single html program through which you can draw a table which consists of 3 row and 4 columns where 1st row contains 4 different column fields of a student's information with red text color and Calibri font style with font 12. Rest cells of whole table contain values with blue text colors and Times new roman font style with font 10.

Program:

```
<html>
  <style>
    th {
      color: red;
      font-family: "Calibri";
      font-size: 12pt;
      border: solid black;
    }
    td {
      color: blue;
      text-align: center;
      font-family: "Times New Roman";
      font-size: 10pt;
      border: solid black;
    }
  </style>
  <body>
    <h2 style="text-align: center">HTML Table</h2>
    <table style="width: 100%">
      <tr>
        <th>Name</th>
        <th>Roll</th>
        <th>Dept.</th>
        <th>Email</th>
      </tr>
      <tr>
        <td>Rahul Nath</td>
        <td>123190803067</td>
        <td>CSE</td>
        <td>rnath@gmail.com</td>
      </tr>
      <tr>
        <td>Subham Dutta</td>
        <td>123456789101</td>
        <td>IT</td>
        <td>sdutta@gmail.com</td>
      </tr>
    </table>
  </body>
</html>
```

Output:

3. Write a single html program where 1st paragraph can collect its specified style from internal stylesheet describes inside that html program and 2nd paragraph can collect its specified style from another file (external stylesheet).

Program:

```
<html>
  <head>
    <style>
      #p1 { color: red; background-color: yellow; text-align: center; }
    </style>
    <link rel="stylesheet" href="style.css" />
  </head>
  <body>
    <p id="p1">This is the 1st paragraph.</p>
    <p id="p2">This is the 2nd paragraph.</p>
  </body>
</html>
```

External-CSS –

style.css

```
#p2 {
  color: yellow;
  background-color: red;
  text-align: center;
}
```

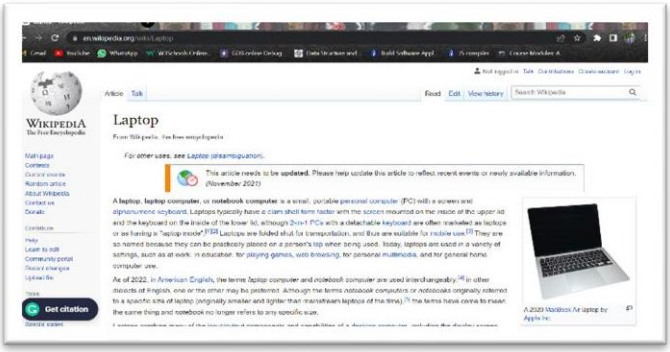
Output:

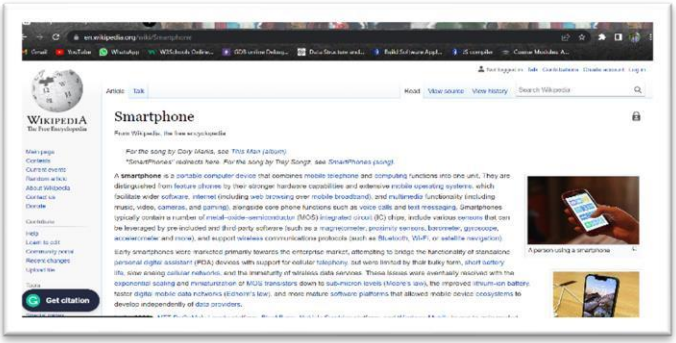
4. Write a single html program which implements image map concept using 'usemap' and <map>.

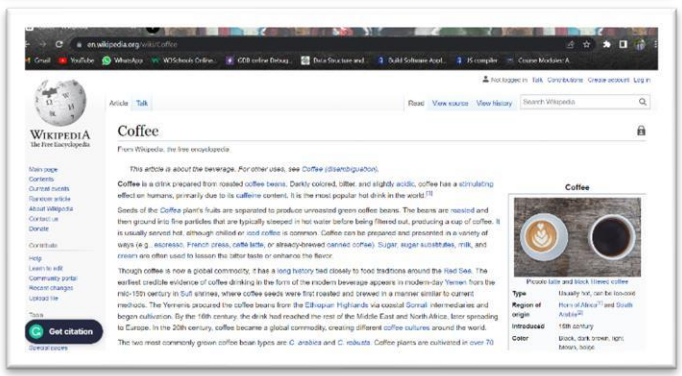
Program:

```
<html>
<body>
<h2>Image Maps</h2>
<p>Click on Laptop/Smartphone/Coffee Cup for a new page:</p>
<img src="workplace.jpg" alt="Workplace" usemap="#workmap" width="400"
height="379">
<map name="workmap">
  <area shape="rect" coords="32,43,272,348" alt="Laptop"
  href="https://en.wikipedia.org/wiki/Laptop">
  <area shape="rect" coords="290,172,333,250" alt="Smartphone"
  href="https://en.wikipedia.org/wiki/Smartphone">
  <area shape="circle" coords="336,300,45" alt="Coffee"
  href="https://en.wikipedia.org/wiki/Coffee">
</map>
</body>
</html>
```

Output:





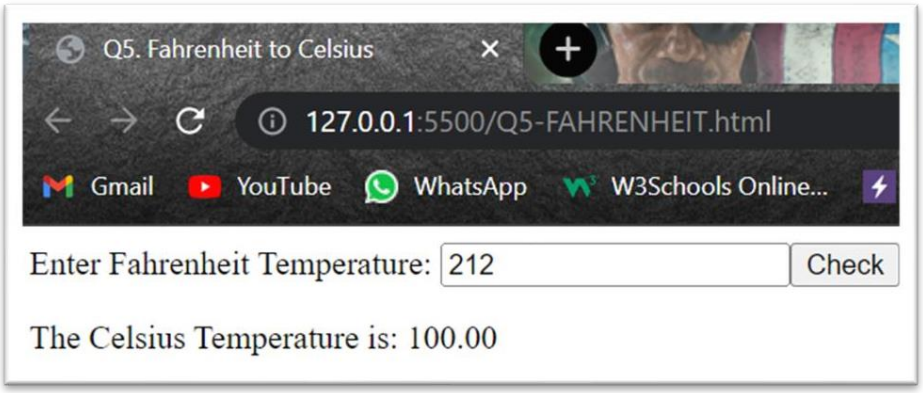


5. Write a html program to find out Celsius temperature of a given Fahrenheit temperature using JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q5. Fahrenheit to Celsius</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("resPara").style.display = "block";
        return (document.getElementById("res").innerHTML = Math.abs(5*((num-
      32)/9)).toFixed(2));
      }
    </script>
  </head>
  <body>
    <p>
      Enter Fahrenheit Temperature: <input id="num" /><button onclick="fun()">
        Check
      </button>
    </p>
    <p id="resPara" style="display: none">
      The Celsius Temperature is: <span id="res"></span>
    </p>
  </body>
</html>
```

Output:



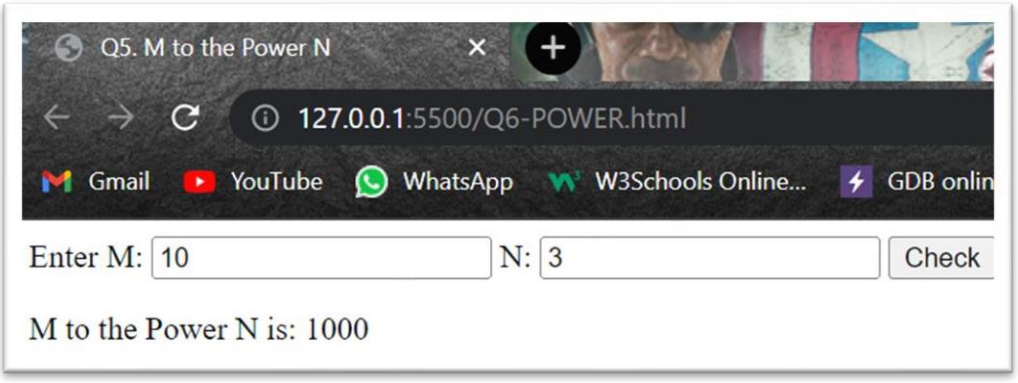
6. Write a html program to find out m to the power n (m, n valid integer no) using a function using JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q5. M to the Power N</title>
    <script>
      var m, n;
      function fun() {
        m = parseInt(document.getElementById("m").value);
        n = parseInt(document.getElementById("n").value);
        document.getElementById("resPara").style.display = "block";

        return (document.getElementById("res").innerHTML = m ** n);
      }
    </script>
  </head>
  <body>
    <p>
      Enter M: <input id="m" /> N: <input id="n" />
      <button onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      M to the Power N is: <span id="res"></span>
    </p>
  </body>
</html>
```

Output:

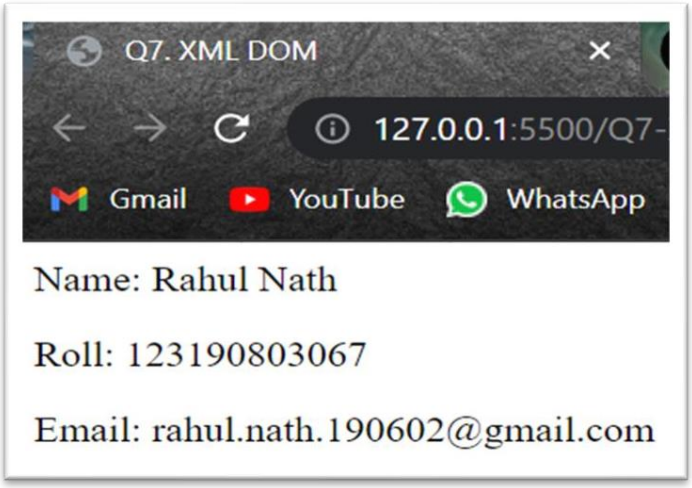


7. Write a xml parsing technique through which parse a text string into an XML DOM object, and extract the info from it with JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q7. XML DOM</title>
  </head>
  <body>
    <p>Name: <span id="n"></span></p>
    <p>Roll: <span id="r"></span></p>
    <p>Email: <span id="e"></span></p>
    <script>
      var parser, xmlDoc;
      var txt =
        "<id>" +
        "<name>Rahul Nath</name>" +
        "<roll>123190803067</roll>" +
        "<email>rahul.nath.190602@gmail.com</email>" +
        "</id>";
      parser = new DOMParser();
      xmlDoc = parser.parseFromString(txt, "text/xml");
      document.getElementById("n").innerHTML =
        xmlDoc.getElementsByTagName("name")[0].childNodes[0].nodeValue;
      document.getElementById("r").innerHTML =
        xmlDoc.getElementsByTagName("roll")[0].childNodes[0].nodeValue;
      document.getElementById("e").innerHTML =
        xmlDoc.getElementsByTagName("email")[0].childNodes[0].nodeValue;
    </script>
  </body>
</html>
```

Output:



8. Write a simple php program through which you can find out maximum and minimum among three no's specified by the user.

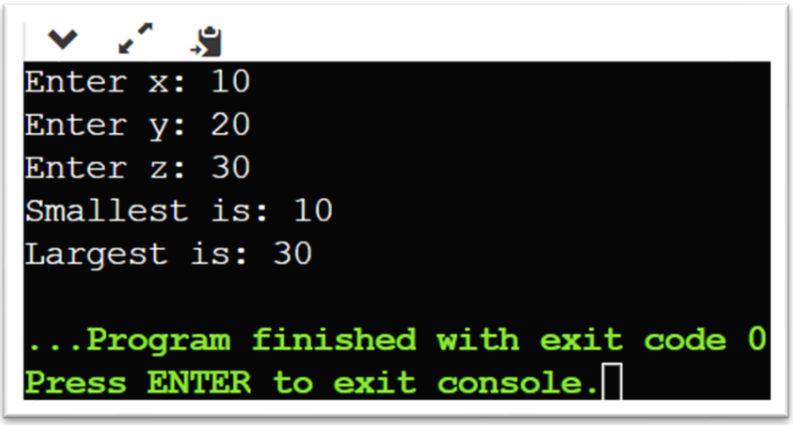
Program:

```php
<?php
function smallest($a,$b,$c)
{
    $min;
    if($a<=$b && $a<=$c){$min = $a;}
    elseif ($b<=$a && $b<=$c) {$min=$b;}
    else{$min=$c;}
    return $min;
}
function largest($a,$b,$c)
{
    $max;
    if($a>=$b && $a>=$c){$max = $a;}
    elseif ($b>=$a && $b>=$c) {$max=$b;}
    else{$max=$c;}
    return $max;
}

$x = (int)readline("Enter x: ");
$y = (int)readline("Enter y: ");
$z = (int)readline("Enter z: ");

echo "Smallest is: ".smallest($x,$y,$z)."\n";
echo "Largest is: ".largest($x,$y,$z);
?>
```

Output:



9. Write a simple php program through which you can implement the concept of GET & POST method w.r.t PHP Form handling.

GET Method-

Program:

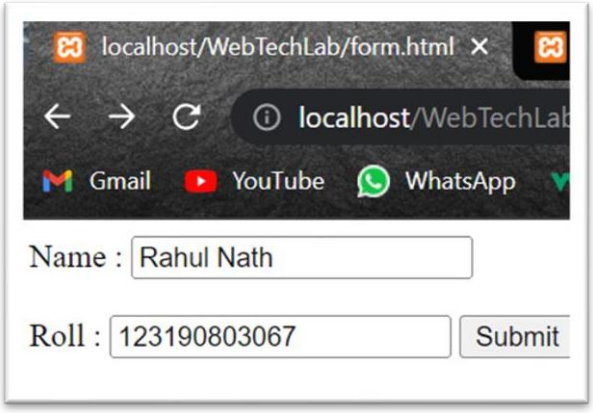
Form.html

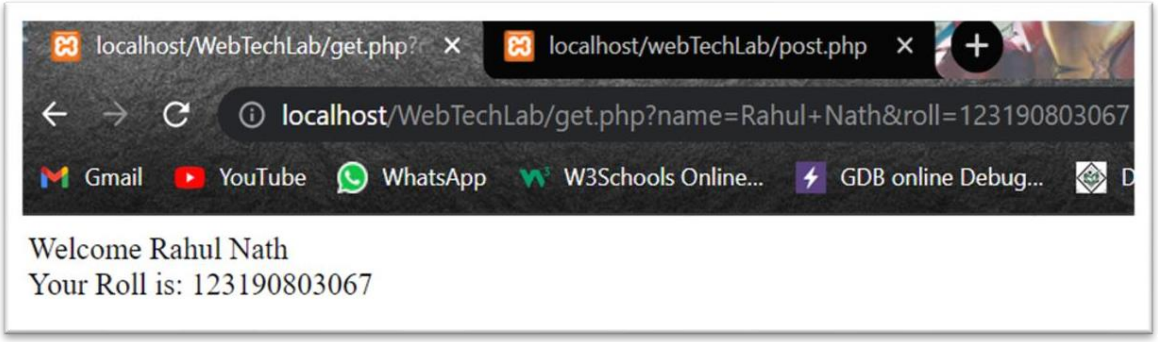
```
<html>
  <body>
    <form action="get.php" method="get">
      Name : <input type="text" name="name" /> <br /><br />
      Roll : <input type="text" name="roll" />
      <input type="submit" />
    </form>
  </body>
</html>
```

Get.php

```
<html>
   <body>
      Welcome <?php echo $_GET["name"]; ?> </br>
      Your Roll is: <?php echo $_GET["roll"]; ?>
   </body>
</html>
```

Output:





POST Method-

Program:

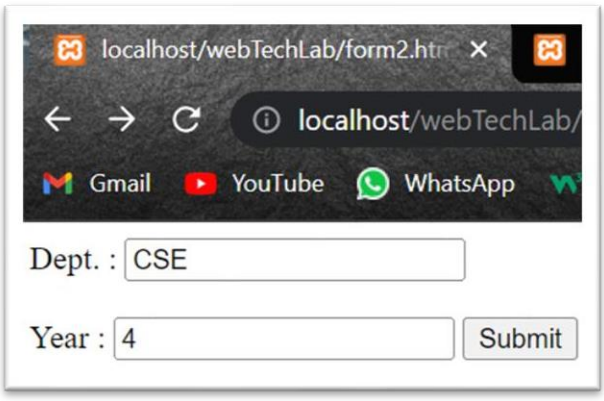
Form2.html

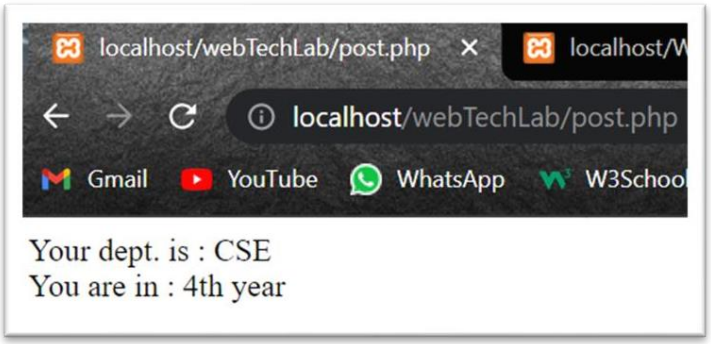
```
<html>
  <body>
    <form action="post.php" method="post">
      Dept. : <input type="text" name="dept" /> <br /><br />
      Year : <input type="text" name="year" />
      <input type="submit" />
    </form>
  </body>
</html>
```

Post.php

```
<html>
   <body>
      Your dept. is : <?php echo $_POST["dept"]; ?> </br>
      You are in : <?php echo $_POST["year"]; ?>th year
   </body>
</html>
```

Output:





10. Write a simple program in ASP.net through which you can create a login page of your own website.

Program:

```
<%@ Page Language="C#" %>

<!DOCTYPE html>
<html lang="en"
xmlns="http://www.w3.org/1999/xhtml"
>
<head runat="server">
<meta charset="utf-8" />
    <title></title>
    <style type="text/css">
        .auto-style1 {
            width: 100%;
        }
        .auto-style2 {
            font-weight: normal;
            width: 261px;
            text-align: right;
        }
        .auto-style3 {
            width: 261px;
        }
        .auto-style4 {
            width: 284px;
            margin-left: 0px;
        }
        .auto-style5 {
            width: 342px;
        }
    </style>
</head>
<body style="font-weight: 700;
color: #000066; text-align: center">
    <form id="form1" runat="server">
        <h1>Login Page</h1>
        <table class="auto-style1">
            <tr>
                <td class="auto-
style2"><strong>Username</strong></t
d>
                <td class="auto-
style5">
                    <input
id="username" class="auto-style4"
type="text" /></td>
                <td>
```

```
<asp:RequiredFieldValidator
ID="RequiredFieldValidator1"
runat="server"
ControlToValidate="username"
ErrorMessage="Please Enter
Username"></asp:RequiredFieldValidator>
                </td>
            </tr>
            <tr>
                <td class="auto-
style2"><strong>Password</strong></td>
                <td class="auto-style5">
                    <input id="password"
class="auto-style4" type="text"
typeof="password" /></td>
                <td>

<asp:RequiredFieldValidator
ID="RequiredFieldValidator2"
runat="server"
ControlToValidate="password"
ErrorMessage="Please Enter
Password"></asp:RequiredFieldValidator>
                </td>
            </tr>
            <tr>
                <td class="auto-style3">
                    <asp:Button
ID="Button1" runat="server" Text="Login"
/>
                </td>
                <td class="auto-style5">
                    <asp:Button
ID="Button2" runat="server" Text="Forgot
Password" />
                </td>
                <td>
                    <asp:Button
ID="Button3" runat="server" Text="Reset"
/>
                </td>
            </tr>
        </table>
    </form>
</body>
</html>
```

11. Write a simple JSP program through which you can print even and odd no separately within a given range.

Program:

```
<html>
<head>
<title> ODD EVEN </title>
</head>
<body>
<form><br>
Enter The Number: <input type="number"
id="num"/><br><br>
Enter The Range: <input type="number"
id="ren"/><br><br>
<input type="submit" value="Submit"
onclick="formdata()"/><br>
</form>

<script>
function formdata()
{
var num = document.getElementById("num").value;
var range = document.getElementById("ren").value;
for (let i = num; i <= range; i++) {
    var rem = (i % 2);
 if (rem == 0) {
      document.writeln("EVEN = " + i);
      document.write("<br>");
} else {

      document.writeln("ODD = " + i);
      document.write("<br>");
}
}
}
</script>
</body>
</html>
```

12. Create an Online Registration form for individual user of a website using Servlet.

Program:

Create a table in Database–

```
create table GfgLogin
(
   name varchar(60),
   email varchar(60),
   pass varchar(100)
)
```

Web.xml –

```
<web-app version="3.0"
xmlns="..."
xmlns:xsi="..." xsi:schemaLocation="..." >
    <servlet>
        <servlet-name>GfgRegister</servlet-name>
        <servlet-class>GfgRegister</servlet-class>
    </servlet>
    <servlet-mapping>
        <servlet-name>GfgRegister</servlet-name>
        <url-pattern>/GfgRegister</url-pattern>
    </servlet-mapping>
    <welcome-file-list>
        <welcome-file>index.html</welcome-file>
    </welcome-file-list>
</web-app>
```

GfgRegister.java –

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class GfgRegister extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse
response)
            throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        PrintWriter out = response.getWriter();

        String name = request.getParameter("name");
        String email = request.getParameter("email");
        String pass = request.getParameter("pass");

        try {
            // loading drivers for mysql
```

```
            Class.forName("com.mysql.jdbc.Driver");
            // creating connection with the database
            Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/geeksforgeeks",
"root", "root");
            PreparedStatement ps = con.prepareStatement("insert into gfglogin
values(?,?,?)");
            ps.setString(1, name);
            ps.setString(2, email);
            ps.setString(3, pass);
            int i = ps.executeUpdate();
            if (i > 0) {
                out.println("You are successfully registered at
geeksforgeeks");
            }
        } catch (Exception se) {
            se.printStackTrace();
        }
    }
}
```

Index.html –

```
<html>
    <head>
        <title>GeeksForGeeks Register form</title>
    </head>
    <body>
    <center>
        <form  method="post"  action="GfgRegister">
        Name:<input type="text" name="name" /><br/><br/>
        Email ID:<input type="text" name="email" /><br/><br/>
        Password:<input type="text" name="pass" /><br/><br/>
        <input type="submit" value="GfgRegister" /><br/>
        </form>
    </center>
    </body>
</html>
```

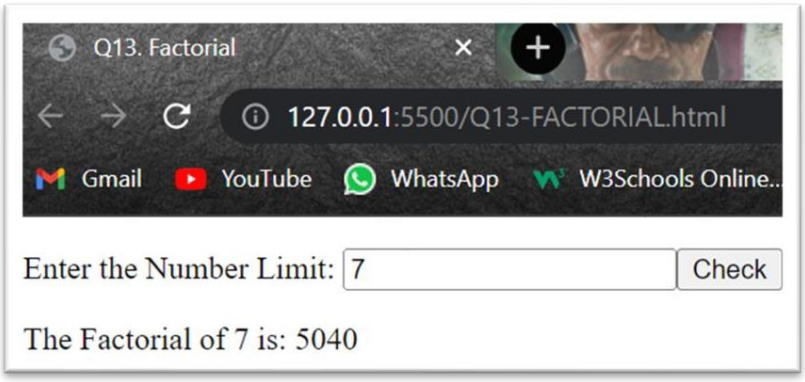
Output:

13.Write a html program to find out the factorial of a number using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q13. Factorial</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("n").innerHTML = num;
        document.getElementById("resPara").style.display = "block";
        t = 1;
        for (var i = 2; i <= num; i++) t = t * i;
        return (document.getElementById("res").innerHTML = t);
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number Limit: <input id="num" /><button onclick="fun()">
        Check
      </button>
    </p>
    <p id="resPara" style="display: none">
      The Factorial of <span id="n"></span> is: <span id="res"></span>
    </p>
  </body>
</html>
```

Output:

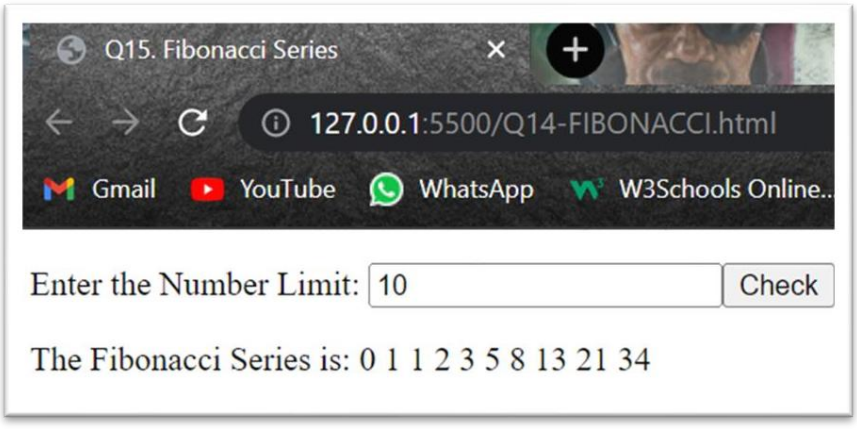


14.Write a html program to find out the Fibonacci Series of a number using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q15. Fibonacci Series</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("resPara").style.display = "block";
        (n1 = 0), (n2 = 1), (ser = n1.toString() + " " + n2.toString());
        if (num == 1) return (document.getElementById("res").innerHTML = 0);
        else if (num == 2)
          return (document.getElementById("res").innerHTML = 0 + " " + 1);
        else {
          for (var i = 3; i <= num; i++) {
            next_num = n1 + n2;
            ser = ser + " " + next_num.toString();
            n1 = n2;
            n2 = next_num;
          }
          return (document.getElementById("res").innerHTML = ser);}
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number Limit: <input id="num" /><button onclick="fun()">
        Check
      </button>
    </p>
    <p id="resPara" style="display: none">
      The Fibonacci Series is: <span id="res"></span>
    </p>
  </body>
</html>
```

Output:

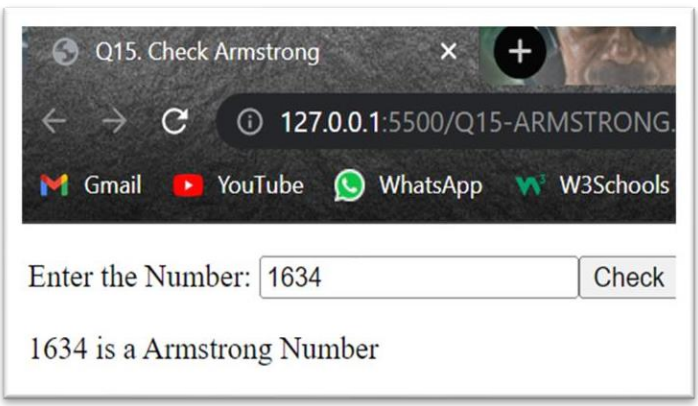


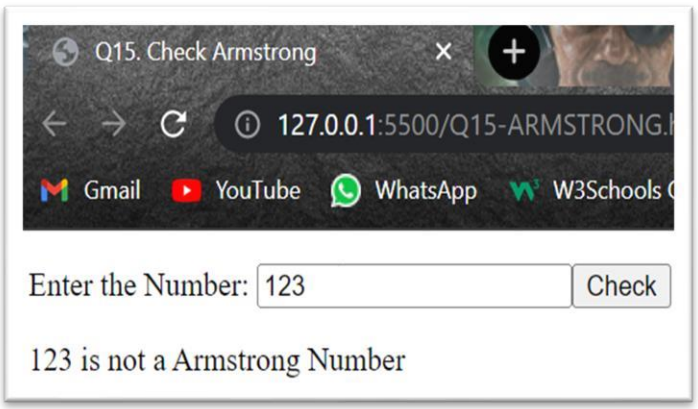
15. Write a html program to find out the whether a number is Armstrong number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q15. Check Armstrong</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("n").innerHTML = num;
        document.getElementById("resPara").style.display = "block";
        len = num.toString().length;
        n = num;
        sum = 0;
        while (n != 0) {
          sum = sum + Math.pow(n % 10, len);
          n = Math.floor(n / 10);
        }
        if (num == sum) {
          return (document.getElementById("res").innerHTML = "a Armstrong");
        } else {
          return (document.getElementById("res").innerHTML = "not a
Armstrong");
        }
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output:





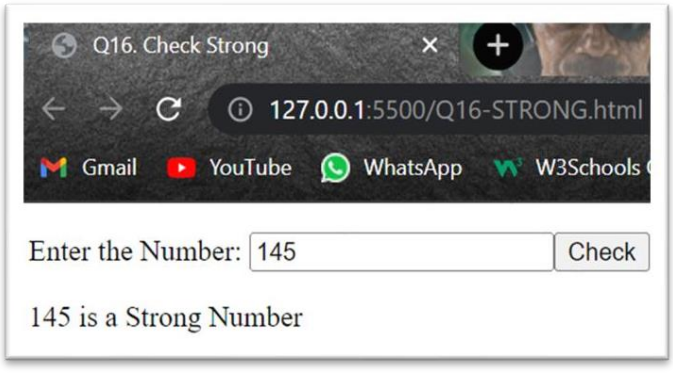
16. Write a html program to find out the whether a number is Strong number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q16. Check Strong</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("n").innerHTML = num;
        document.getElementById("resPara").style.display = "block";

        n = num;
        sum = 0;
        while (n != 0) {
          t = 1;
          for (var i = n % 10; i > 1; i--) {
            t = t * i;
          }
          sum = sum + t;
          n = Math.floor(n / 10);
        }
        if (num == sum) {
          return (document.getElementById("res").innerHTML = "a Strong");
        } else {
          return (document.getElementById("res").innerHTML = "not a Strong");
        }
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output:

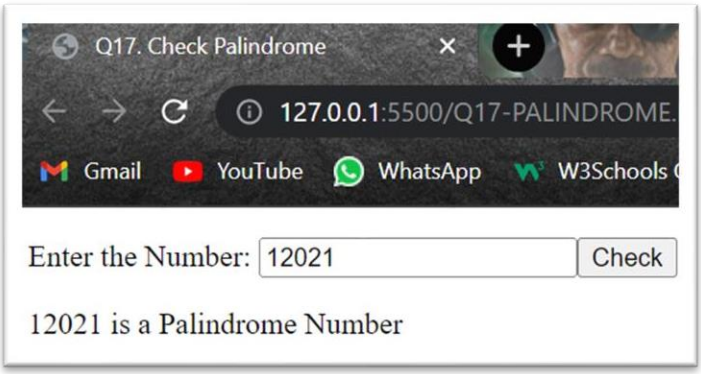


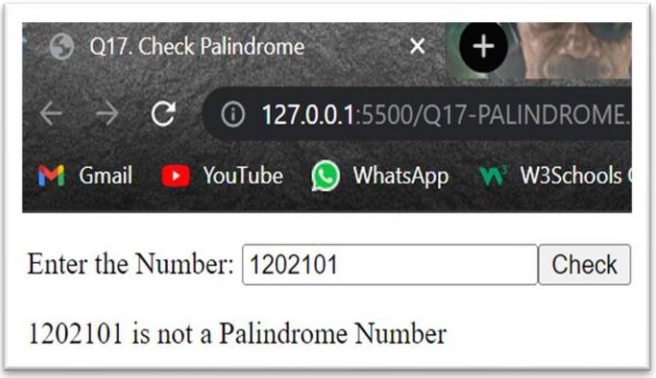
17. Write a html program to find out the whether a number is Palindrome number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q17. Check Palindrome</title>
    <script>
      var num;
      function fun() {
        num = document.getElementById("num").value.toString();
        document.getElementById("n").innerHTML = num;
        document.getElementById("resPara").style.display = "block";
        for (var i = 0; i < num.length / 2; i++) {
          if (num[i] != num[num.length - i - 1]) {
            return (document.getElementById("res").innerHTML =
              "not a Palindrome");
          }
        }
        return (document.getElementById("res").innerHTML = "a Palindrome");
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output:



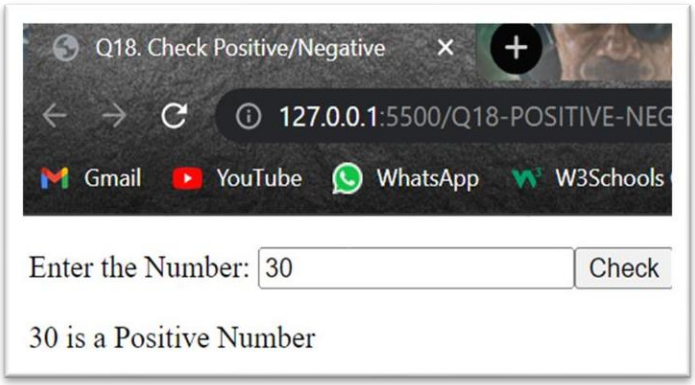


18.Write a html program to find out the whether a number is positive/negative number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q18. Check Positive/Negative</title>
    <script>
      var num, temp;
      function fun() {
        num = document.getElementById("num").value;
        document.getElementById("n").innerHTML = num;
        if (num) {
          document.getElementById("resPara").style.display = "block";
          if (num >= 0)
            document.getElementById("res").innerHTML = "a Positive";
          else document.getElementById("res").innerHTML = "a Negative";
        }
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output:

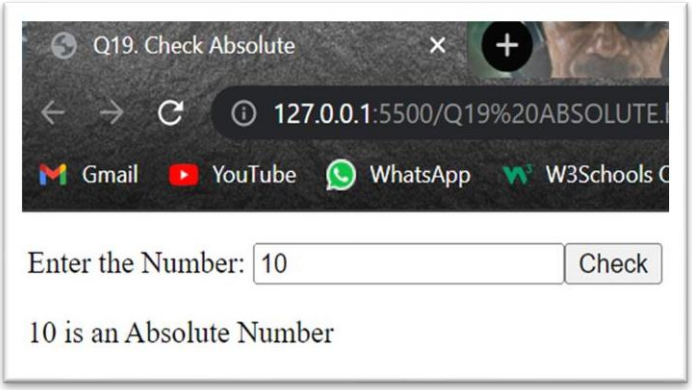


19. Write a html program to find out the whether a number is absolute number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q19. Check Absolute</title>
    <script>
      var num;
      function fun() {
        num = document.getElementById("num").value;
        document.getElementById("n").innerHTML = num;
        if (num) {
          document.getElementById("resPara").style.display = "block";
          if (num >= 0)
            document.getElementById("res").innerHTML = "an Absolute";
          else document.getElementById("res").innerHTML = "not an Absolute";
        }
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output:



20. Write a html program to find out the whether a number is even/odd number or not using a function in JavaScript.

Program:

```
<html lang="en">
  <head>
    <title>Q20. Check Odd/Even</title>
    <script>
      var num;
      function fun() {
        num = parseInt(document.getElementById("num").value);
        document.getElementById("n").innerHTML = num;
        if (num) {
          document.getElementById("resPara").style.display = "block";
          if (num % 2 == 0) document.getElementById("res").innerHTML = "Even";
          else document.getElementById("res").innerHTML = "Odd";
        }
      }
    </script>
  </head>
  <body>
    <p>
      Enter the Number: <input id="num" /><button
onclick="fun()">Check</button>
    </p>
    <p id="resPara" style="display: none">
      <span id="n"></span> is an <span id="res"></span> Number
    </p>
  </body>
</html>
```

Output: