WP PROGRAMS 1-7

Labcycle 1: Create a form with the elements of Textboxes, Radio buttons, Checkboxes, and so on. Write JavaScript code to validate the format in email, and mobile number in 10 characters, If a textbox has been left empty, popup an alert indicating when email, mobile number and textbox has been left empty.

```
<html>
<head>
<title>Form Validation</title>
</head>
<body bgcolor="pink">
<form id="myForm">
<label for="name">Name:</label>
<input type="text" id="name" name="name"><br><br>

<label for="email">Email:</label>
<input type="text" id="email" name="email"><br><br>

<label for="mobile">Mobile Number:</label>
<input type="text" id="mobile" name="mobile"><br><br>

<label>Gender:</label>
<input type="radio" id="male" name="gender" value="Male">Male
<input type="radio" id="female" name="gender" value="Female">Female<br><br>

<label>Hobbies:</label>
<input type="checkbox" id="reading" name="hobbies" value="Reading">Reading
<input type="checkbox" id="traveling" name="hobbies" value="Traveling">Traveling<br><br>
```

```html
<input type="submit" value="Submit">
</form>

<script>
    document.getElementById("myForm").addEventListener("submit", function(event)
        {
        event.preventDefault();

        // Validation for email format
        var email = document.getElementById("email").value;
        var emailPattern = /^[a-zA-Z0-9._-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$/;

        // Validation for mobile number length (assuming 10 characters)
        var mobile = document.getElementById("mobile").value;

        // Check if any required field is left empty
        var name = document.getElementById("name").value;

        if (name == "" || email == "" || mobile == "") {
           alert("Please fill in all required fields.");
        } else if (!emailPattern.test(email)) {
           alert("Invalid email format. Please enter a valid email address.");
        } else if (mobile.length != 10 || isNaN(mobile)) {
           alert("Mobile number should be 10 digits numeric.");
        } else {
           // Form is valid, you can submit it or perform further actions here
```
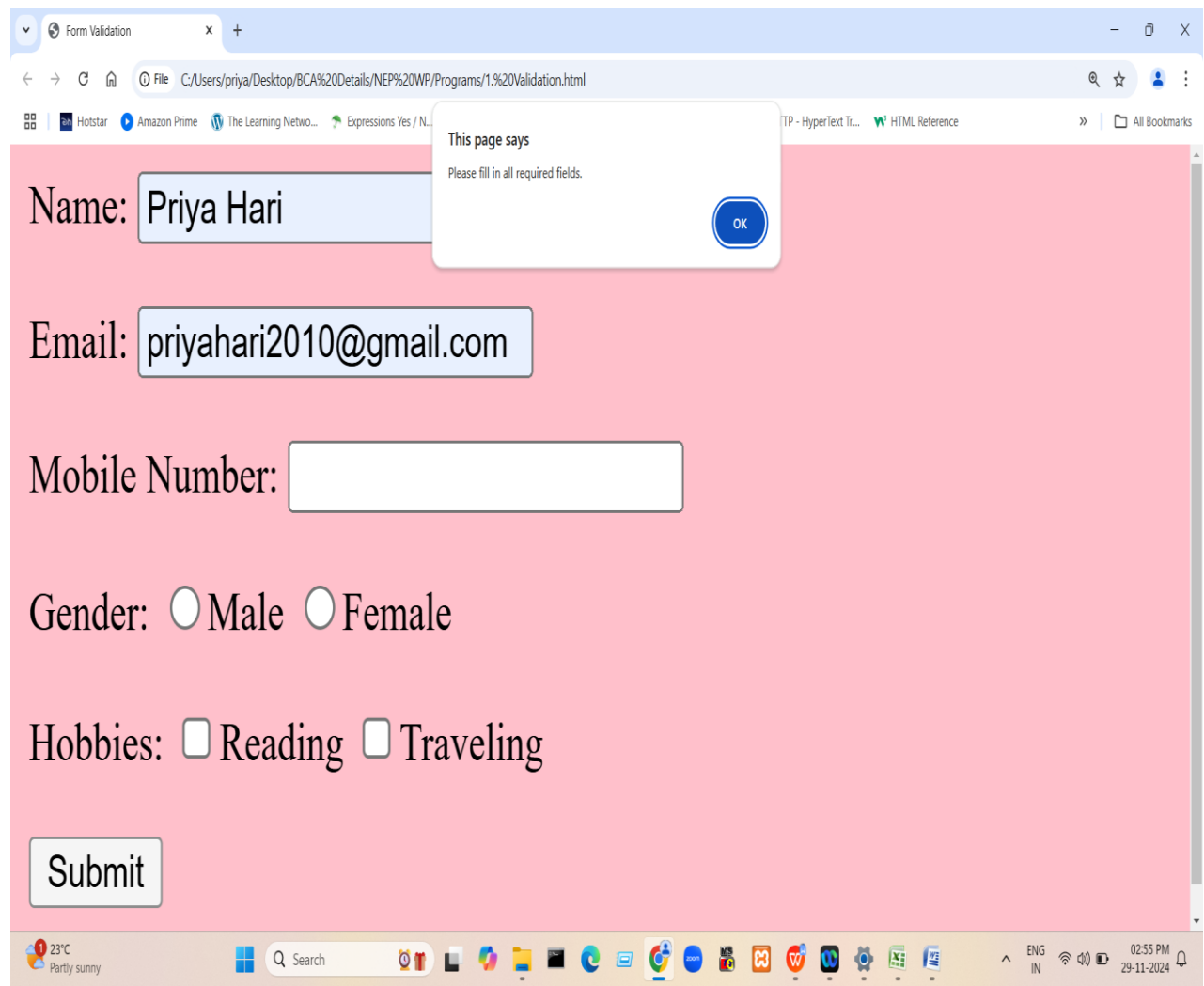
```
            alert("Form submitted successfully!");
        }
    });
</script>
</body>
</html>
```

<u>OUTPUT</u>

Labcycle 2: Develop a HTML Form, which accepts any Mathematical expression. Write JavaScript code to Evaluates the expression and Displays the result.

```html
<html>
<head>
<title> Expression Evaluation</title>
<script type="text/javascript">
     function exp()
     {
     var n=document.myForm.value1.value;
     var result=eval(n);
     document.myForm.answer.value=result;
     }
</script>
</head>
     <body bgcolor="pink">
     <h2><u>Evaluation of Expressions</u></h2>
<hr></hr>
<hr></hr>
     <form name="myForm">
     Expression:<input type="text"
name="value1"/>&nbsp&nbsp&nbsp&nbsp

          <input type="button" value="CALCULATOR"
onclick="exp()"/><br></br>
               Result : <input type="text" name="answer"/>
     </form>
     </body>
     </html>
```

OUTPUT
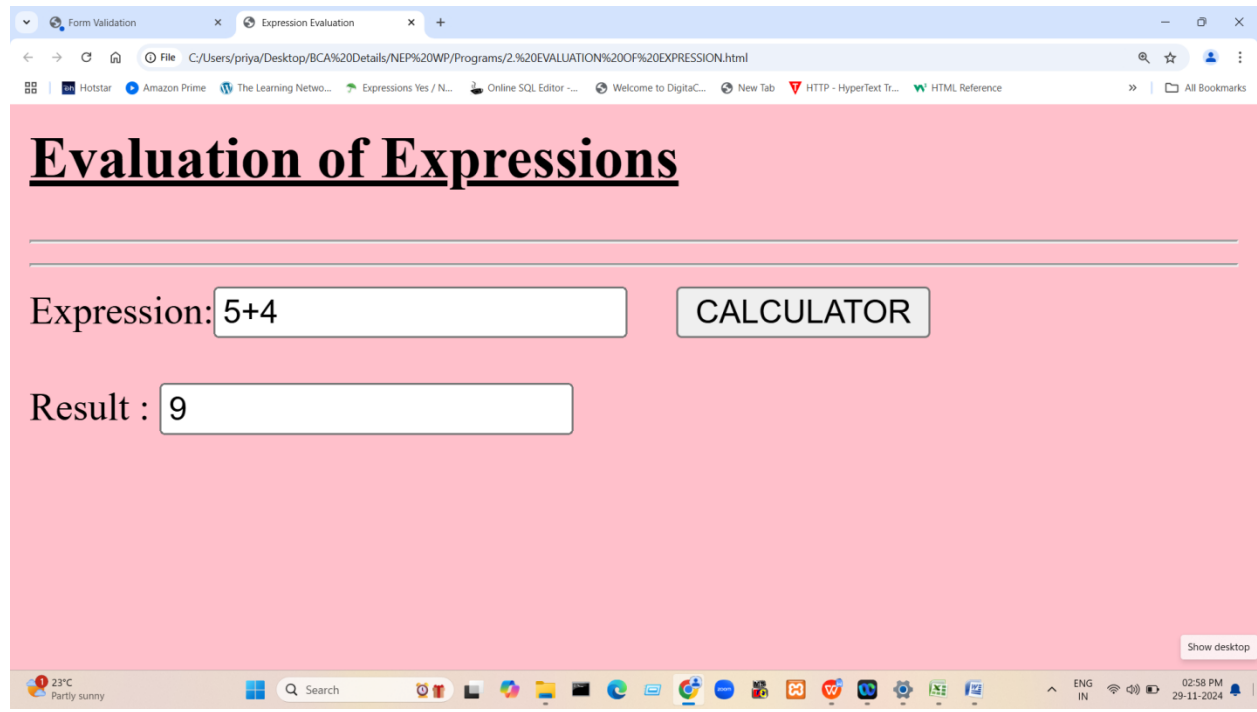
Labcycle 3: Create a page with dynamic effects. Write the code to include layers and basic animation.

```html
<html>
<head>
<style>
   .moveable{ position: absolute;

   }
</style>
<script type = "text/javascript">
   var x = 5;
   var y = 5;
   var dest_x = 300;
   var dest_y = 300;
   var interval = 10;
   function moveImage()
   {
      if(x < dest_x)
          x = x + interval;
      if(y < dest_y)
          y = y + interval;
```
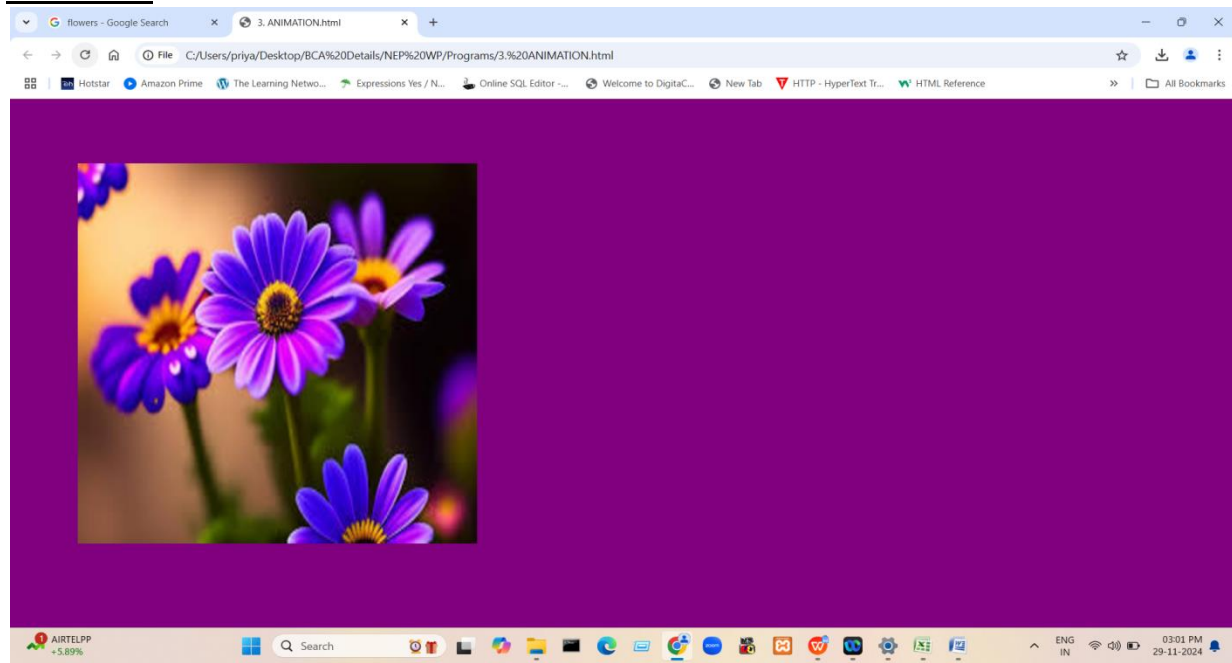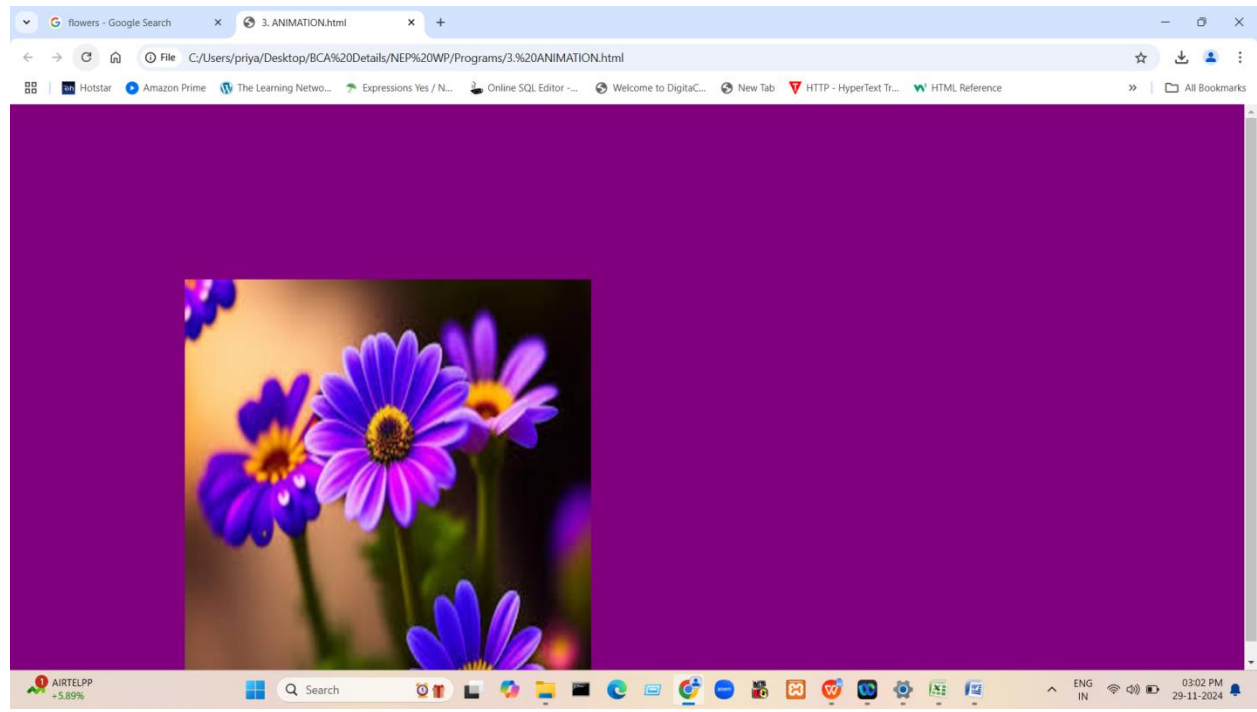
```
        document.getElementById("image").style.top = y + "px";
        document.getElementById("image").style.left = x + "px";
        if((x + interval < dest_x) && (y + interval < dest_y))
        {
            window.setTimeout("moveImage()", 100);
        }
    }
</script>
</head>
<body bgcolor="purple" onload = "moveImage()">
    <div id = "image" class = "moveable">
        <img  height="500"  width="500"  src  =  "  C:\Users\Desktop\BCA
Details\WEB PROGRAMMING\WP Programs\Part A\Beauty.jpg"
                alt = "please link to a valid image" />
    </div>
</body>
</html>
```
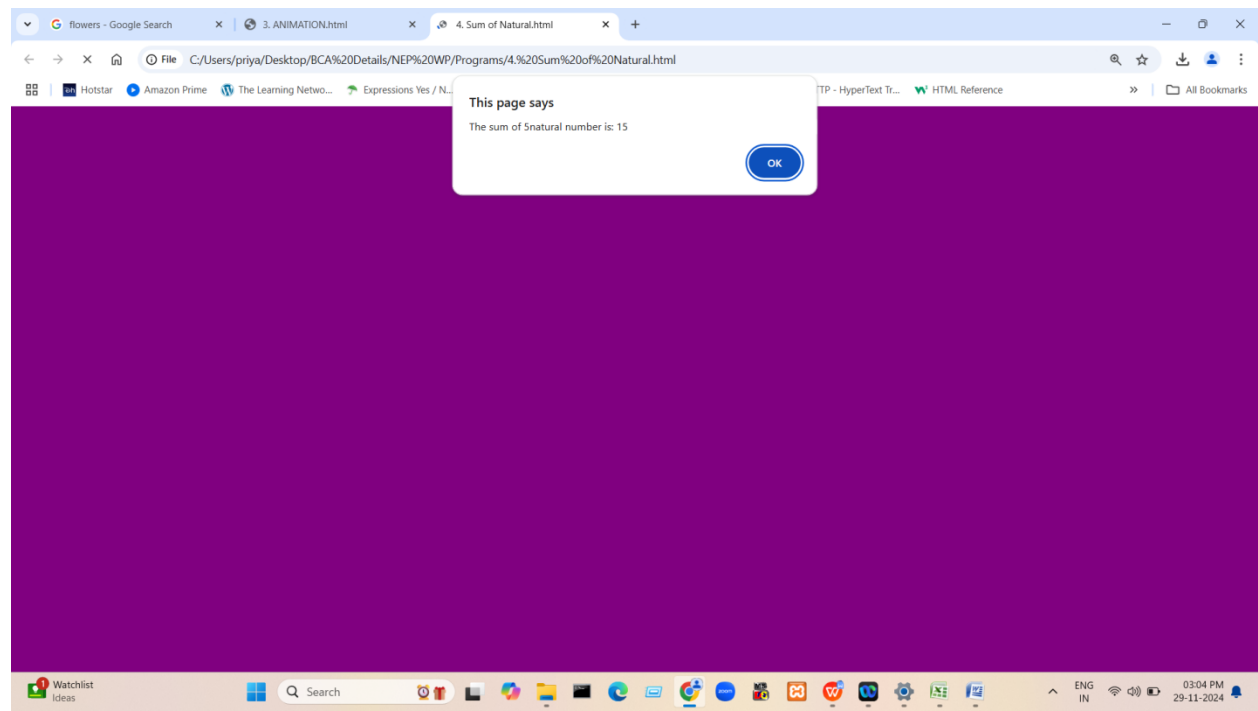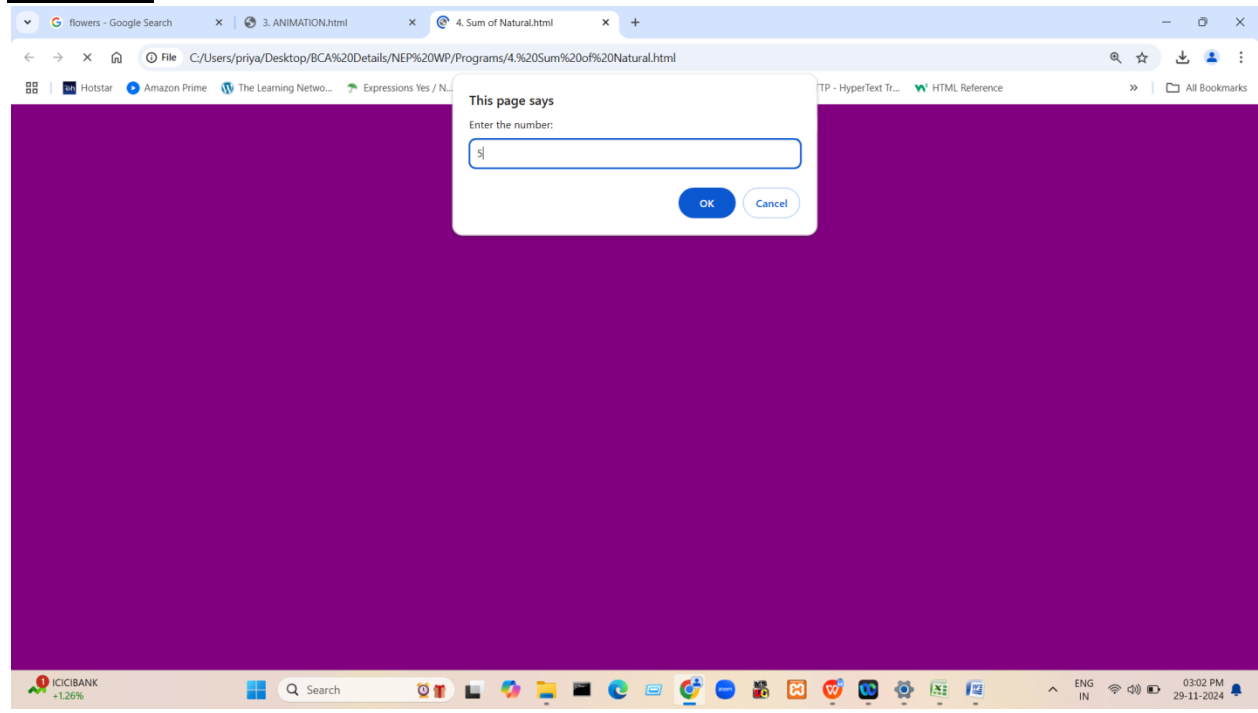
OUTPUT

Labcycle 4: Write a JavaScript code to find the sum of N natural Numbers. (Use userdefined function)

```html
<html>
<head>
<script type = "text/javascript">
    var num = window.prompt("Enter the number:","");
    var n = parseInt(num);
    result = sum(n);
    window.alert("The sum of " + n + "natural number is: " + result);
    function sum(n)
    {
      var i;
      var sum = 0;
      for(i = 1;i <= n; i++){
         sum = sum + i;}
      return (sum);
    }
</script>
</head>
<body bgcolor="purple">
```

```
</html>
```

OUTPUT

Labcycle 5: Write a JavaScript code block using arrays and generate the current date in words, this should include the day, month and year.

```html
<html>
<head>
<title> TO DISPLAY THE SYSTEM DATE</title>
<script>

 var d = new Date();
 var weekday = new
Array("Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday");
 var monthname = new
Array("Jan","Feb","Mar","Apr","May","June","July","Aug","Sep","Oct","November","December");
   document.write(weekday[d.getDay()] + " ");
   document.write(monthname[d.getMonth()] + " ");
   document.write(d.getFullYear());
</script>
</head>
<body bgcolor="green" text="white">
</body>
</html>
```

OUTPUT
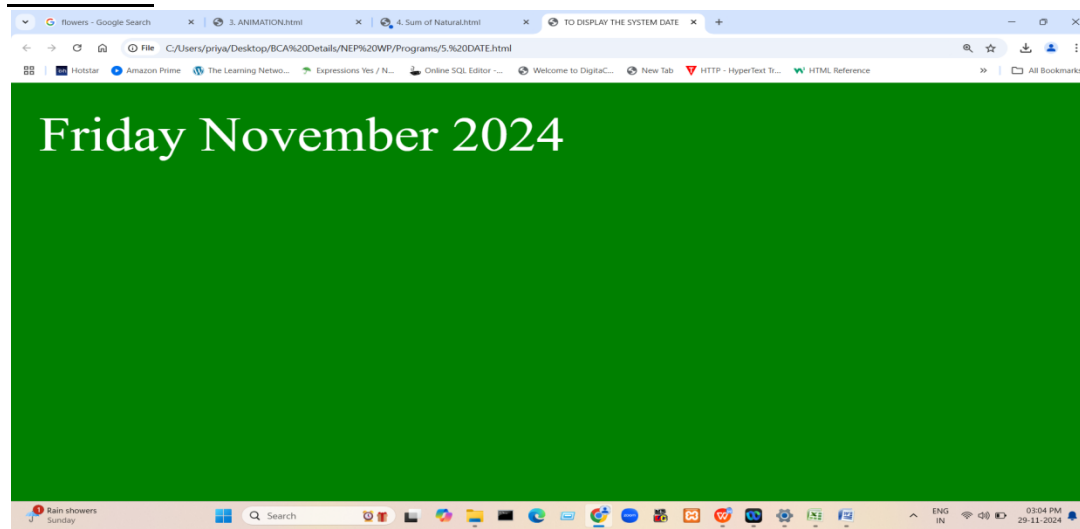
Labcycle 6: Create a form for Student information. Write JavaScript code to find Total, Average, Result and Grade.

```html
<html>
 <head>
   <title>Registration Form</title>
   <script type = "text/javascript">
     function calc()
{  var m1,m2,m3,avg = 0,total = 0, result = " ",grade = " ";
           m1 = parseInt(document.form1.WP.value);
           m2 = parseInt(document.form1.AI.value);
           m3 = parseInt(document.form1.CG.value);
           total = m1+m2+m3;
           avg = total/3;
           if( m1 < 35 || m2 < 35 || m3 < 35)
           {       result = "fail";
           grade = "D";      }

        else if(avg >= 75)
        {       result = "Distinction";
           grade = "A+";      }

    else if(avg >= 60 && avg < 75)
       {       result = "First class";
           grade = "A";     }

   else if(avg >= 50 && avg < 60)
       {      result = "Second class";
     grade = "B";     }

   else if(avg >=35 && avg < 50)
       {       result = "Pass class";
           grade = "C";     }

 else  if (avg < 35)     {
     result = "Fail";        Grade = "F";
           }
```

```html
            document.form1.result.value = result;
          document.form1.grade.value = grade;
                  document.form1.total.value = total;
                  document.form1.average.value =  avg;          }
      </script>
    </head>
    <body bgcolor= "Orange" >

      <form name = "form1">
        <center><h2>Student Marks</h2>
                <table border = "10">
          <tr>
            <td> Student Name</td>
            <td><input type = "text"  /></td>
          </tr>
          <tr>
            <td colspan = "2" align = "center">Subject Marks</td>
          </tr>
          <tr>
            <td>Web Programming</td>
            <td><input type = "text" name = "WP" /></td>
          </tr>
          <tr>
            <td>Artificial Intelligence</td>
            <td><input type = "text" name = "AI"/></td>
          </tr>
          <tr>
            <td>Data Mining</td>
            <td><input type = "text" name = "CG" /></td>
          </tr>
            <td  colspan  =  "2"  align  =  "center"><input  type  =  "button"
onclick  = "calc()" value = "CALCULATE" /></td>
          </tr>
          <tr>
            <td>Total</td>
```

```html
        <td><input type = "text" name = "total"/></td>
      </tr>
      <tr>
        <td>Average</td>
        <td><input type = "text" name = "average" /></td>
      </tr>
      <tr>
        <td>Result</td>
        <td><input type = "text" name = "result" /></td>
      </tr>
      <tr>
        <td>Grade</td>
        <td><input type = "text" name = "grade"/></td>
      </tr>
    </table></center>
  </form>
 </body>
</html>
```

OUTPUT

Labcycle 7: Create a form for Employee information. Write JavaScript code to find DA, HRA, PF, TAX, Gross pay, Deduction and Net pay.

```html
<html>
<head>
  <title>Employee Salary Details</title>
  <script type="text/javascript">
    function showSalary()
      {
              var empname = document.getElementById ( "empname" ) .value;
              var empno = document.getElementById ( "empno" ) .value;
              var basic = parseInt ( document.getElementById ( "basic" ) .value );
              var hra = basic * 0.4;
              var da = basic * 0.6;
              var gross = basic + hra + da;
              var pf = gross * 0.13;
              var tax = gross * 0.2;
              var deductions = pf + tax;
              var netsalary = gross - deductions;
              document.writeln ( " <table border='5'> ");
              document.writeln ( " <tr> <th> Employee Salary Details </th> </tr> ");
              document.writeln ( " <tr> <td> Emp Name: </td> <td> " + empname + " </td> </tr> ");
              document.writeln ( " <tr> <td> Emp No: </td> <td> " + empno + " </td> </tr> " );
              document.writeln ( " <tr> <td> Basic Salary: </td> <td> " + basic + " </td> </tr> " );
              document.writeln ( " <tr> <td> HRA: </td> <td> " + hra + " </td> </tr> " );
```

```
            document.writeln ( " <tr> <td> DA: </td> <td> " + da + "
</td> </tr> " );
             document.writeln ( " <tr> <td> Gross Salary: </td> <td> " +
gross + " </td> </tr> " );
            document.writeln ( " <tr> <td> PF: </td> <td> " + pf + "
</td> </tr> " );
            document.writeln ( " <tr> <td> Tax: </td> <td> " + tax + "
</td> </tr> " );
            document.writeln ( " <tr> <td> Deductions: </td> <td> " +
deductions + " </td> </tr> " );
             document.writeln ( " <tr> <td> Net Salary: </td> <td> " +
netsalary + " </td> </tr> " );
        }
   </script>
 </head>

<body bgcolor="blue">
      <form>
        <table border="5">

            <tr>
                 <th> Employee Details </th>
            </tr>

            <tr>
                 <th> Employee Name: </th>
              <td> <input type="text" id="empname" /> </td>
            </tr>

            <tr>
                 <th> Employee No: </th>
              <td> <input type="text" id="empno" /> </td>
            </tr>

            <tr>
                 <th> Basic Pay: </th>
```

```
                    <td> <input type="number" id="basic" /> </td>
                </tr>
            </table>
                <br /><input type="button" value="Show Salary Details"
onClick="showSalary()" />
            </form>
</body>
</html>
```

OUTPUT