WEB TECHNOLOGY LABORATORY WITH MINI PROJECT (15CSL77)

1. Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient.

Program 1 - JavaScript : Simple calculator

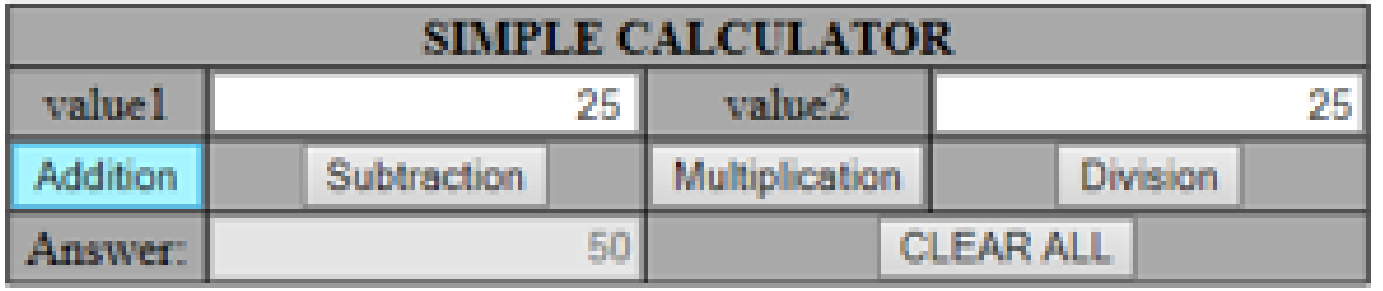
```
<!DOCTYPE HTML>
<html>
 <head>
        <style>
                table, td, th
                {
                        border: 1px solid black;
                        width: 33%;
                        text-align: center;
                        background-color: DarkGray;
                        border-collapse:collapse;
                }

table { margin: auto; }
                input { text-align:right; }
        </style>
```

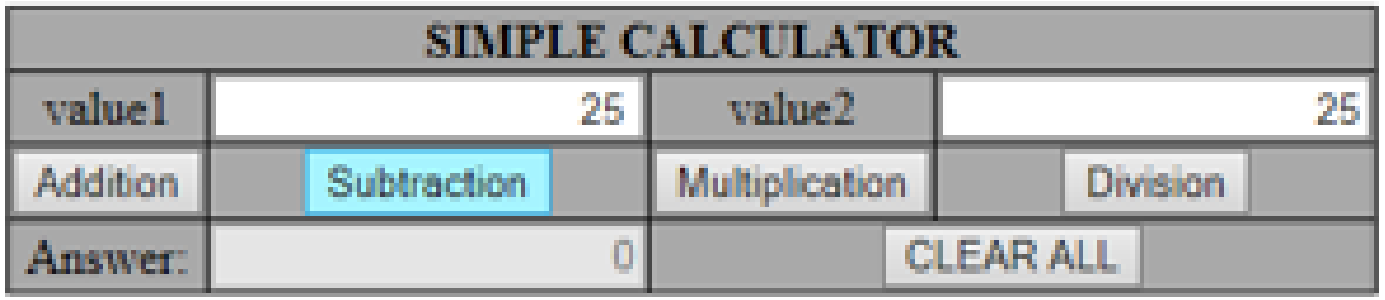
```
<script type="text/javascript">
        function calc(clicked_id)
        {
            var val1 = parseFloat(document.getElementById("value1").value);
            var val2 = parseFloat(document.getElementById("value2").value);
            if(isNaN(val1)||isNaN(val2))
              alert("ENTER VALID NUMBER");
                    else if(clicked_id=="add")
                        document.getElementById("answer").value=val1+val2;
else if(clicked_id=="sub")
                        document.getElementById("answer").value=val1-val2;
                    else if(clicked_id=="mul")
                        document.getElementById("answer").value=val1*val2;
```

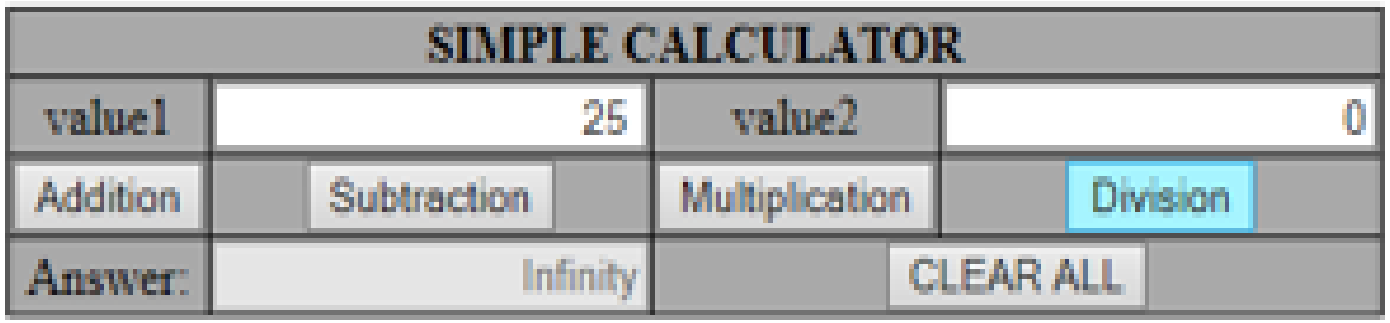
```
else if(clicked_id=="div")

                document.getElementById("answer").value=val1/val2;

        }

        function cls()
        {
            value1.value=" ";
            value2.value=" ";
            answer.value="";
        }

    </script>
</head>
<body>
```

```
<table>
<tr><th colspan="4"> SIMPLE CALCULATOR </th></tr>
      <tr><td>value1</td><td><input type="text" id="value1" value=" "/> </td>
         <td>value2</td><td><input type="text" id="value2" value=" "/> </td> </tr>
       <tr> <td> <input type="button" value="Addition" id = "add" onclick="calc(this.id)"/></td>
              <td> <input type="button" value="Subtraction" id = "sub" onclick="calc(this.id)"/></td>
              <td> <input type="button" value="Multiplication" id = "mul" onclick="calc(this.id)"/></td>
              <td> <input type="button" value="Division" id ="div" onclick="calc(this.id)"/></td></tr>
       <tr> <td>Answer:</td> <td> <input type="text" id="answer" value="" disabled/></td>
       <td colspan="2"><input type="button" value="CLEAR ALL" onclick="cls()"/></td>
</tr>
</table>
  </body>
</html>
```

Program 1 - JavaScript : Simple calculator – OUTPUT:







2. Write a JavaScript that calculates the squares and cubes of the numbers from 0 to 10 and outputs HTML text that displays the resulting values in an HTML table format.

Program 2 - JavaScript : Calculate squares and cubes of the numbers from 0 to 10

```
<!DOCTYPE HTML>
<html>
        <head>
                <style>
                        table,tr, td
                        {
                        border: solid black;
                                width: 33%;
                                text-align: center;
                                border-collapse: collapse;
 background-color:lightblue;
                        }

                        table { margin: auto; }
                </style>
```

```
<script>
                document.write( "<table> <tr><th colspan='3'> NUMBERS FROM 0 TO 10
                                WITH THEIR SQUARES AND CUBES </th></tr>" );
                document.write( "<tr> <td>Number</td> <td>Square</td> <td>Cube</td>
                                </tr>" );
                for(var n=0; n<=10; n++)
                {
                        document.write( "<tr><td>" + n + "</td><td>" + n*n + "</td><td>"
                                        + n*n*n + "</td></tr>" ) ;
                }
                document.write( "</table>" ) ;
        </script>
    </head>
</html>
```

Program 2 - JavaScript : Calculate squares and cubes of the numbers from 0 to 10 - OUTPUT

NUMBERS FROM 0 TO 10 WITH THEIR SQUARES AND CUBES		
Number	Square	Cube
0	0	0
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729
10	100	1000

3. Write a JavaScript code that displays text “TEXT-GR OWING” with increasing font size in the interval of 100ms in RED COLOR, when the font size reaches 50pt it displays “TEXT-SHRINKING” in BLUE color. Then the font size decreases to 5pt.

Program 3 - JavaScript : TEXT-GROWING and TEXT-SHRINKING

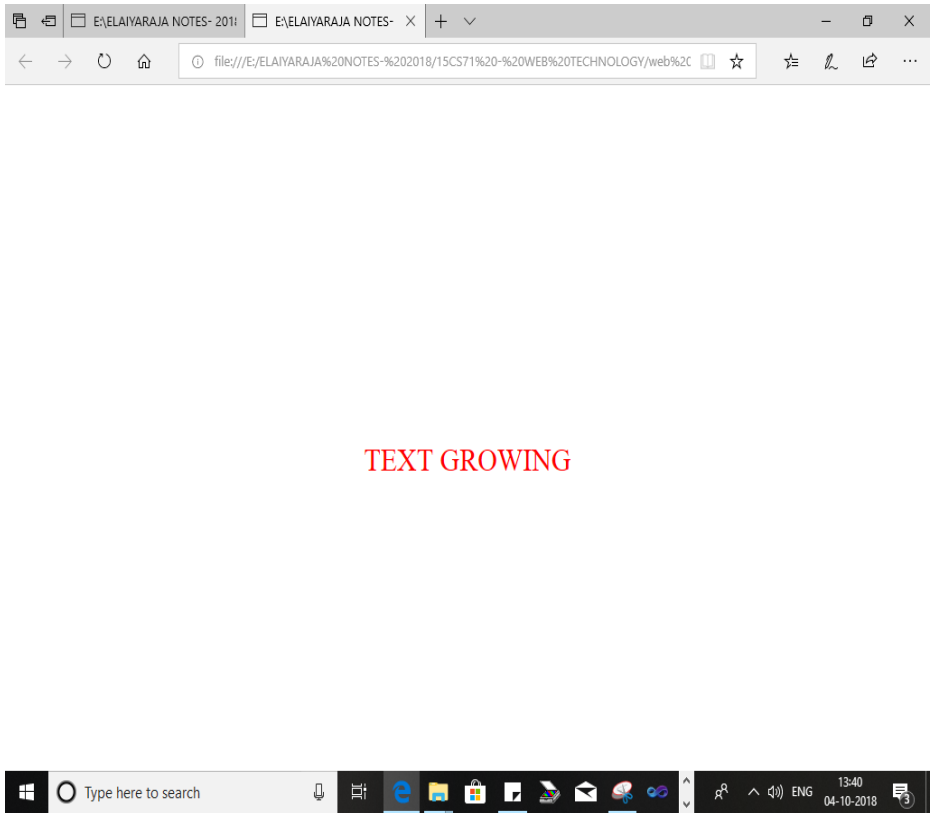
```
<!DOCTYPE HTML>
<html>
<head>
  <style>
            p
 {          position: absolute;
     top: 50%;
     left: 50%;
     transform: translate(-50%, -50%);
  }
 </style>
</head>
<body>
<p id="demo"></p>
            <script>
      var var1 = setInterval(inTimer, 1000);
            var fs = 5;
            var ids =  document.getElementById("demo");
```

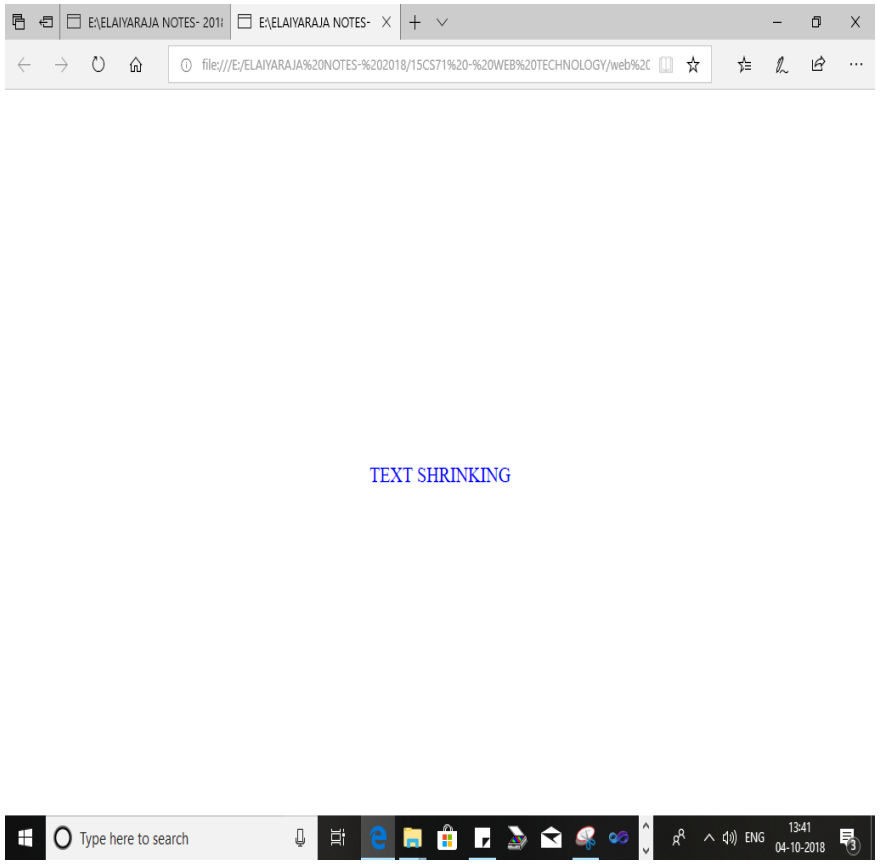
```
function inTimer()
    {                              ids.innerHTML = 'TEXT GROWING';
        ids.setAttribute('style', "font-size: " + fs + "px; color: red");
                fs += 5;
        if(fs >= 50 )
{
        clearInterval(var1);
                var2 = setInterval(deTimer, 1000);
                }
        }
```

```
function deTimer()
 {
fs -= 5;
        ids.innerHTML = 'TEXT SHRINKING';
                ids.setAttribute('style', "font-size: " + fs + "px; color: blue");


        if(fs === 5 )
{
clearInterval(var2);
                }
        }
        </script>
</body>
</html>
```

Program 3 - JavaScript : TEXT-GROWING and TEXT-SHRINKING

OUTPUT





4. Develop and demonstrate a HTML5 file that includes JavaScript script that uses functions for the following problems:

a. Parameter: A string

b. Output: The position in the string of the left-most vowel

c. Parameter: A number

d. Output: The number with its digits in the reverse order

Program 4 - HTML5 and JavaScript :

a) position in the string of the left-most vowel

b) number with its digits in the reverse order

```
<!DOCTYPE HTML>
<html>
   <body>
        <script type="text/javascript">
        var str = prompt("Enter the Input","");

      if(!(isNaN(str)))
      {
              var num,rev=0,remainder;
        num = parseInt(str);
```

```
while(num!=0) {
                remainder = num%10;
                 num = parseInt(num/10);
                 rev = rev * 10 + remainder;
                }
                alert("Reverse of "+str+" is "+rev);
                }
        else
        {
                str = str.toUpperCase();
                for(var i = 0; i < str.length; i++) {
                        var chr = str.charAt(i);
                        if(chr == 'A' || chr == 'E' || chr == 'I' || chr == 'O' || chr == 'U')break;
                }
```

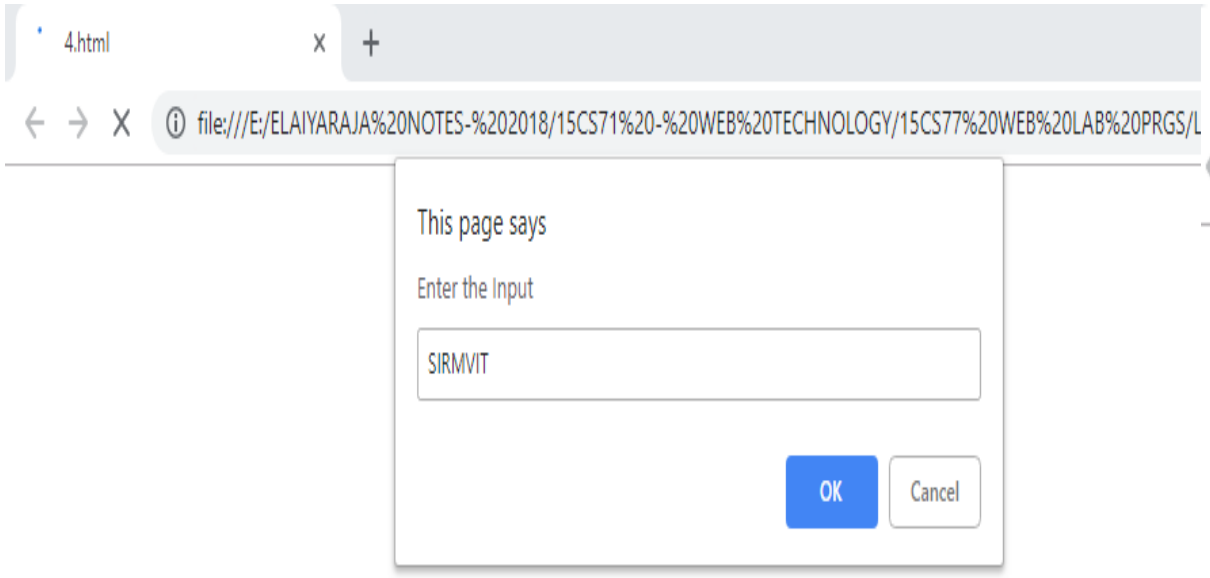
```
if( i < str.length )
                    alert("The position of the left most vowel is "+(i+1));
                else
                    alert("No vowel found in the entered string");
    }
        </script>
 </body>
</html>
```

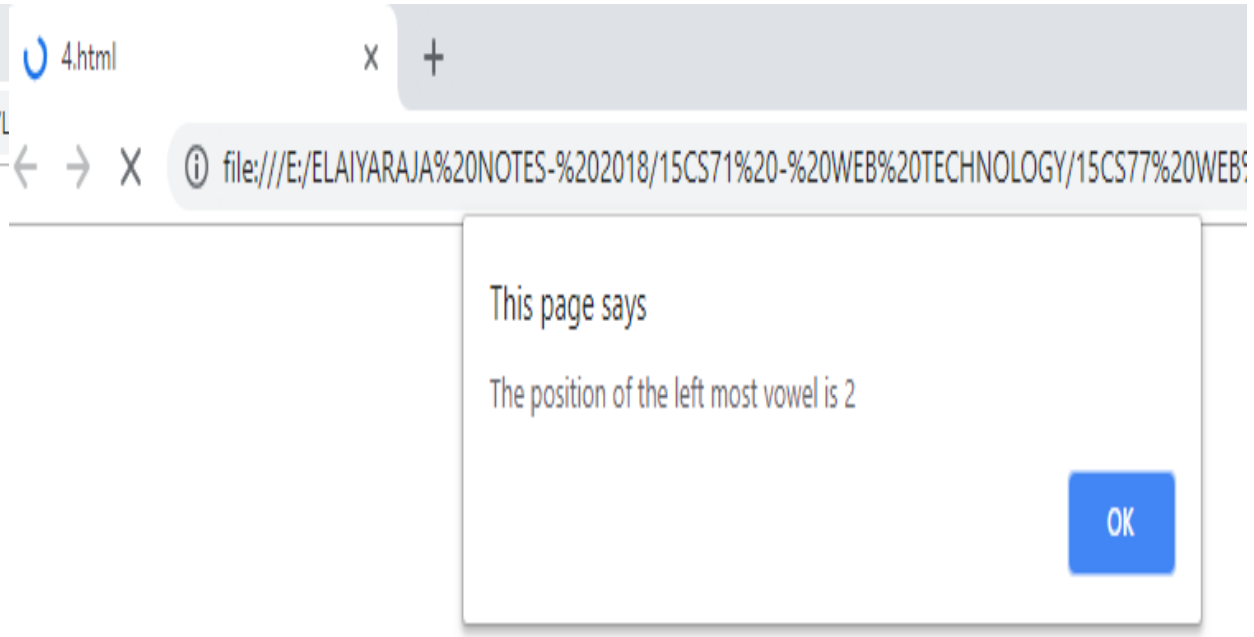
Program 4 - HTML5 and JavaScript :

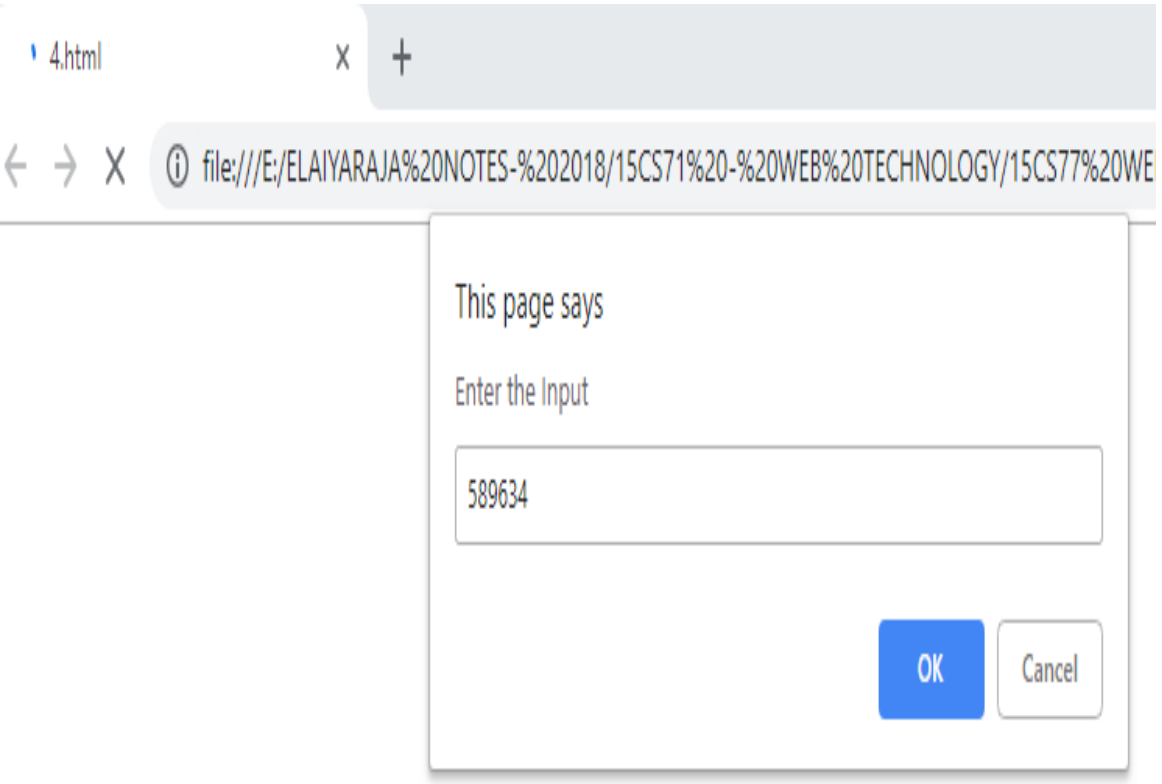
a) position in the string of the left-most vowel

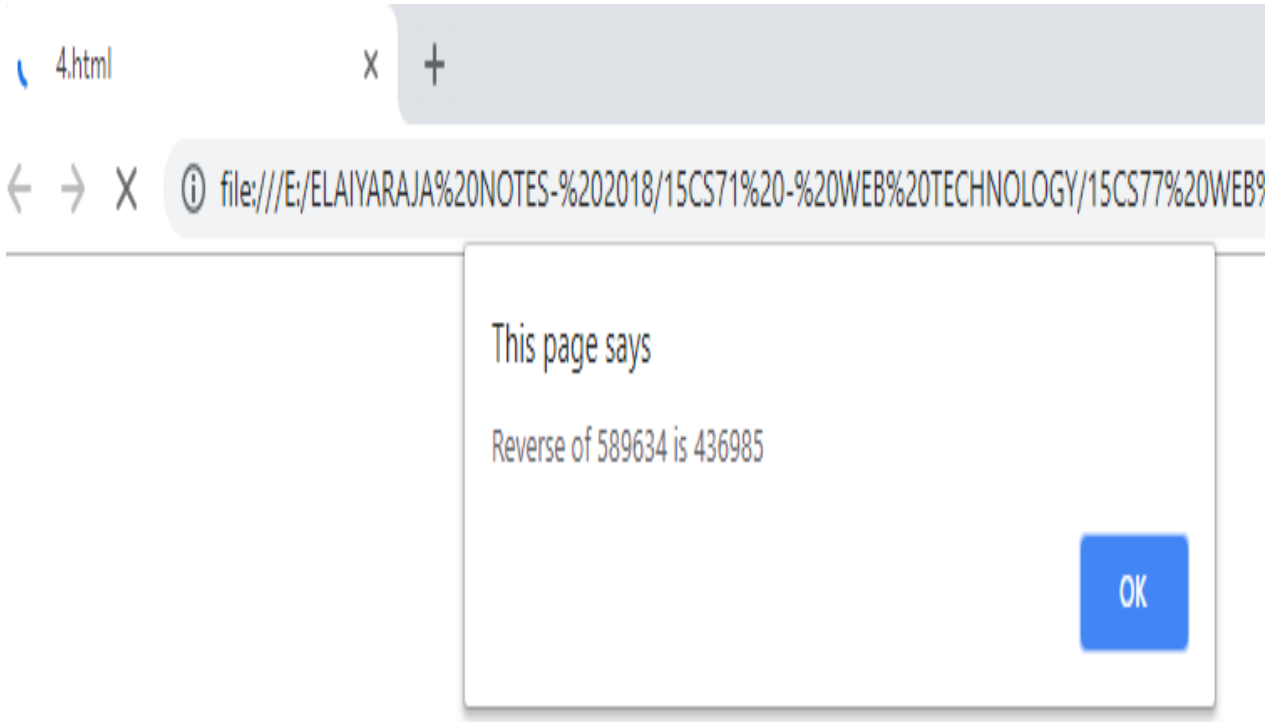
b) number with its digits in the reverse order

OUTPUT :






4.html
file:///E:/ELAIYARAJA%20NOTES-%202018/15CS71%20-%20WEB%20TECHNOLOGY/15CS77%20WE
This page says
Enter the Input
589634
OK
Cancel


4.html
file:///E:/ELAIYARAJA%20NOTES-%202018/15CS71%20-%20WEB%20TECHNOLOGY/15CS77%20WEB
This page says
Reverse of 589634 is 436985
OK

5. Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, and Name of the College, Branch, Year of Joining, and email id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the document.

Program 5 - XML document to store information about a student .

href="5.css“ //CREATE CSS FILE

```
student
{
        display:block; margin-top:10px; color:Navy;
}
USN
{
        display:block; margin-left:10px;font-size:14pt; color:Red;
}
name
{
        display:block; margin-left:20px;font-size:14pt; color:Blue;
}
college
{
        display:block; margin-left:20px;font-size:12pt; color:Maroon;
}
```

```
branch
{
        display:block; margin-left:20px;font-size:12pt; color:Purple;
}
year
{
        display:block; margin-left:20px;font-size:14pt; color:Green;
}
e-mail
{
        display:block; margin-left:20px;font-size:12pt; color:Blue;
}
```

// SAVE CSS FILE

```
<?xml-stylesheet type="text/css" href="5.css" ?>        // REFERENCE CSS FILE
<!DOCTYPE HTML>
<html>
<head>
<h1>  STUDENTS DETAILS </h1>
</head>
<students>
<student>
        <USN>USN      :   1MV16CS021</USN>
        <name>NAME    :   VENKAT</name>
        <college>COLLEGE:   SIRMVIT</college>
        <branch>BRANCH  :   Computer Science and Engineering</branch>
        <year>YEAR    :   2016</year>
        <e-mail>E-Mail  :   venkat@gmail.com</e-mail>
</student>
```

<student>

<USN>USN : 1MV11IS031</USN>

<name>NAME : ADITYA</name>

<college>COLLEGE: SIRMVIT </college>

<branch>BRANCH : Information Science and Engineering</branch>

<year>YEAR : 2011</year>

<e-mail>E-Mail : aditya@gmail.com</e-mail>

</student>

```
<student>
        <USN>USN      :  1MV15ME044</USN>
        <name>NAME    :  DEVARAJA</name>
        <college>COLLEGE:  SIRMVIT </college>
        <branch>BRANCH :  Mechanical and Engineering</branch>
        <year>YEAR    :  2015</year>
        <e-mail>E-Mail :  devaraja@gmail.com</e-mail>
</student>
</students>
 </html>
```

Program 5 - XML document to store information about a student

OUTPUT: