

# Web Technology Laboratory With Mini Project

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Programs: 1-5

Exp: 1 [7/12/2020]

Title :- Calculator Program Using Javascript

Aim :- Write a JavaScript to design a simple calculator to perform the following operations : Sum, product, difference and quotient

Program :-

```
<!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 a valid Number")
      }
    </script>
  </head>
  <body>
    <table border="1">
      <tr>
        <td>
          <input type="text" value="value1"/>
        </td>
        <td>
          <input type="text" value="value2"/>
        </td>
      </tr>
    </table>
  </body>
</html>
```

```
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 = "0"
```

```
    value2.value = "0";
```

```
    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="0" /></td>
```

```
            <td>value2</td>
```

```
            <td><input type="text" id="value2" value="0" /></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>
```

```
    </table>
```

```
<br>
```

```
<td>Answer: </td>
```

```
<td><input type="text" id="answer" value="" disabled/></td>
```

```
<td colspan="2"><input type="button" value="CLEAR ALL" onclick="clear()" /></td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Output:-

SIMPLE CALCULATOR			
Value 1	<input type="text"/>	Value 2	<input type="text"/>
Addition	Subtraction	Multiplication	Division
Answer:	<input type="text"/>	Clear All	

Test Cases:-

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	val1 = 10.2 val2 = 2.3	Addition: 12.5 Subtraction: 7.89 Multiplication: 23.45 Division: 4.43	Addition: 12.5 Subtraction: 7.89 Multiplication: 23.45 Division: 4.43	PASS
2.	val1 = 0 val2 = 10	Addition: 10 Subtraction: -10 Multiplication: 0 Division: 0	Addition: 10 Subtraction: -10 Multiplication: 0 Division: 0	PASS
3.	val1 = 10 val2 = 0	Addition: 10 Subtraction: 10 Multiplication: 0 Division: infinity	Addition: 10 Subtraction: 10 Multiplication: 0 Division: infinity	PASS
4.	val1 = abc val2 = 23	ENTER A VALID NUMBER	ENTER A VALID NUMBER	PASS
5.	val1 = 50 val2 = xyz	ENTER A VALID NUMBER	ENTER A VALID NUMBER	PASS

Exp: 2 [7/12/2020]Title : To calculate Squares and Cubes of NumbersAim : 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 tableProgram

&lt;!DOCTYPE HTML&gt;

&lt;html&gt;

&lt;head&gt;

&lt;style&gt;

table, tr, td {

border: solid black;

width: 330px;

text-align: center;

border-collapse: collapse;

background-color: lightblue; }

table {

margin: auto;

}

&lt;/style&gt;

&lt;script&gt;

document.write("<table><tr><th colspan='3'> NUMBERS FROM 0 TO 10  
WITH THEIR SQUARES AND CUBES</th></tr>");

document.write("&lt;tr&gt;&lt;th&gt; Number&lt;/th&gt;&lt;th&gt; Square&lt;/th&gt;&lt;th&gt; Cube&lt;/th&gt;&lt;/tr&gt;");

for (var n=0; n&lt;=10; n++) {

document.write("<tr><td>" + n + "</td><td>" + n\*n + "</td><td>"  
+ n\*n\*n + "</td></tr>");

}

document.write("&lt;/table&gt;");

&lt;/script&gt;

&lt;/head&gt;

&lt;/html&gt;

## Output:

NUMBERS FROM 0 TO 10 WITH THEIR SQUARES & 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

## Exp:3 [ 8/12/2020 ]

Title: Javascript code to grow & Shrink the given text in given format

Aim: Write a JavaScript Code that displays text "TEXT-GROWING" with increasing font-size in the interval of 100ms in RED colour, when the font size reaches 50pt it displays "TEXT-SHRINKING" in BLUE colour. Then the font size decreases to 5pt.

## Program

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
{
```

```
font-family: sans-serif;
```

```
position: absolute;
```

```
top: 50%;
```

```
left: 50%;
```

```
transform: translate(-50%, -50%);
```

```

</style>
</head>
<body>
  <p id="demo"></p>
  <script>
    var var1 = setInterval(inTimes, 1000);
    var fs = 5;
    var ids = document.getElementById("demo");
    function inTimes() {
      ids.innerHTML = 'TEXT GROWING';
      ids.setAttribute('style', "font-size: " + fs + "px; colour: red");
      fs += 5;
      if (fs >= 50) {
        clearInterval(var1);
        var2 = setInterval(deTimes, 1000);
      }
    }
    function deTimes() {
      fs -= 5;
      ids.innerHTML = 'TEXT SHRINKING';
      ids.setAttribute('style', "font-size: " + fs + "px; color: blue");
      if (fs == 5) {
        clearInterval(var2);
      }
    }
  </script>
</body>
</html>

```

Output:

TEXT - GROWING

TEXT - SHRINKING



Exp-4: [9/12/2020]

Title :- Develop and demonstrate a HTML 5 file with Javascript to solve prescribed problems

Aim :- Develop and demonstrate a HTML5 file that includes JavaScript that uses functions for the following problems:

- Ⓐ Parameter : A string
- Ⓑ Output : The position in the string of the left-most vowel
- Ⓒ Parameter : A number
- Ⓓ Output : The number of digits in the reverse order.

Program:-

```
<!DOCTYPE HTML>
<html>
  <body>
    <script>
      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 ch = str.charAt(i);
          if (ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U')
            break;
        }
      }
    }
  }
</body>
</html>
```

```
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>
```

Output:

Enter the input

Enter the input

Reverse of 123456 is 654321

The position of the left most vowel is 2

Test cases

Test No.	Input Params	Expected O/P	Obtained O/P	Remarks
1	123	Reverse of 123 is 321	Reverse of 123 is 321	PASS
2	Copacorn	The position of the left most vowel is 2	The position of the left most vowel is 2	PASS
3	SKY	No vowel found in the entered string	No vowel found in the entered string	PASS
4	MNKTO	The position of the left most vowel is 5	The position of the left most vowel is 5	PASS



Exp -5: [9/12/2020]

Title: Design XML document to store information of a student and to create a CSS style sheet to display the document

Aim: Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name, College Name, 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]

```
<?xml-stylesheet type="text/css" href="5.css"?>
```

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<head>
```

```
<h1>STUDENTS DESCRIPTION</h1>
```

```
</head>
```

```
<students>
```

```
<student>
```

```
<usn> USN: 16D17ED001 </usn>
```

```
<name> NAME: AJAY </name>
```

```
<college> COLLEGE: ACEM </college>
```

```
<branch> BRANCH: CSE </branch>
```

```
<year> YEAR: 2017 </year>
```

```
<email> E-mail: ajay@gmail.com </e-mail>
```

```
</student>
```

```
<student>
```

```
<usn> USN: 16D17ED002 </usn>
```

```
<name> NAME: AKHIL </name>
```

```
<college> COLLEGE: ACEM </college>
```

```
<branch> BRANCH: CSE </branch>
```

```
<year> YEAR: 2017 </year>
```

```
<email> E-mail: akhil@gmail.com </e-mail>
```

```
</student>
```

&lt;Student&gt;

&lt;USN&gt; USN: 16D17C0003 &lt;/USN&gt;

&lt;name&gt; NAME: AMAN &lt;/name&gt;

&lt;College&gt; COLLEGE: ACEM &lt;/College&gt;

&lt;branch&gt; BRANCH: CSE &lt;/branch&gt;

&lt;year&gt; YEAR: 2017 &lt;/year&gt;

&lt;e-mail&gt; Email: aman@gmail.com &lt;/e-mail&gt;

&lt;/Student&gt;

&lt;/Students&gt;

&lt;/html&gt;

(5.css)

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;

}

Output:

## STUDENTS DESCRIPTION

USN: 14D17C00101

NAME: AJAY

COLLEGE: GCEM

BRANCH: CSE

YEAR: 2017

Email: ajay@gmail.com

USN: 14D17C00102

NAME: AKHIL

COLLEGE: GCEM

BRANCH: CSE

YEAR: 2017

E-mail: akhil@gmail.com.

USN: 14D17C00103

NAME: AMAN

COLLEGE: GCEM

BRANCH: CSE

YEAR: 2017

E-mail: aman@gmail.com

Exp: 6 [11/11/2020]

Title: PHP program to find and display the number of visitors visiting the web page

Aim: Write a PHP program to keep track of the number of visitors visiting the webpage and to display this count of visitor, with proper headings

Program

```
<?php
```

```
    $file = 'counter.txt'
```

```
    $count = strval (file_get_contents ($file));
```

```
    file_put_contents ($file, $count + 1);
```

```
    echo "<center><h1>VISITOR COUNT</h1>";
```

```
    echo "<h3>You are visitor number:". $count . "</h3><br>";
```

```
?>
```

Output

VISITOR COUNT

You are visitor number 5

Exp: 7 [11/12/2020]

Title: PHP program to display the current time of the server.

Aim: Write a PHP program to display a digital clock which displays the current time of the server

Program:

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<head>
```

```

<meta http-equiv="refresh" content="1"/>
<style>
p{
  colour:white;
  font-size:90px;
  position:absolute;
  top:50%;
  left:50%;
  transform:translate(-50%,-50%);
}
body{background-color:black;}
</style>
<p>
<?php
  echo date("h:i:SA");?>
</p>
</head>

```

Output

10:44:08 AM