

WEB TECHNOLOGY LABORATORY WITH MINI PROJECT

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Subject → Web Technology Laboratory with mini project

Subject Code → 17CSL77

Program : 1

Write a Java Script to design a simple calculator to perform the following operation : sum, product, difference and quotient.

```
<!DOCTYPE>
<html>
<head>
  <link rel="stylesheet" href="style.css"/>
</head>
<center>
<body>
  <form name="calculator">
    <table border="3">
      <tr><td colspan='4'><input name="display" id="display" readonly></td></tr>
      <tr>
        <td><input type="button" value="1" onclick="calculator.display.value += '1'"></td>
        <td><input type="button" value="2" onclick="calculator.display.value += '2'"></td>
      </tr>
    </table>
  </form>
</body>
</html>
```

```
<td><input type="button" value="3" onclick="calculator.  
display.value += '3'"></td>  
<td><input type="button" value="4" onclick="calculator.  
display.value += '+'"></td>  
  
<tr>  
  <td><input type="button" value="4" onclick="calculator.  
display.value += '4'"></td>  
  <td><input type="button" value="5" onclick="calculator.  
display.value += '5'"></td>  
  <td><input type="button" value="6" onclick="calculator.  
display.value += '6'"></td>  
  <td><input type="button" value="/" onclick="calculator.  
display.value += '/'></td>  
  
<tr>  
  <td><input type="button" value="7" onclick="calculator.  
display.value += '7'"></td>  
  <td><input type="button" value="8" onclick="calculator.  
display.value += '8'"></td>  
  <td><input type="button" value="9" onclick="calculator.  
display.value += '9'"></td>  
  <td><input type="button" value="*" onclick="calculator.  
display.value += '*'></td>
```

<tr>

<td><input type="button" value=". " onclick="calculator.
display.value += '.'"></td>
<td><input type="button" value="0" onclick="calculator.
display.value += '0'"></td>
<td><input type="button" value=" = " onclick=
"calculator.display.value = eval(calculator.display.value)">
</td>

<td><input type="button" value="/" onclick="calculator.
display.value += '/'></td>

<td><

</tr>

<tr>

<td><input type="button" value="c" onclick="calculator.
display.value = ""></td>

<td><input type="button" value="%." onclick="calculator.
display.value += '.%'"></td>

</tr>

<script>src = "bjy.js"></script>

</table>

</form>

</body>

</center>

</html>

style.css

form {

border-radius: 1px;
border: double black 1px;
margin-bottom: 10px;
text-align: center;
width: 216px;
color: black;

}

input[type="button"] {
border-radius: 100px;
background-color: grey;
color: black;
border-color: width;
width: 100%;

}

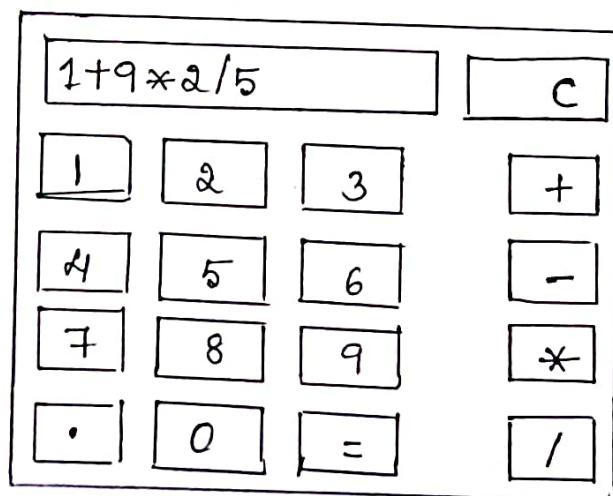
input[type="text"] {
border-radius: 20px;
text-align: right;
border-color: width;
width: 96%;

g

isty.js

```
function display(val){  
    document.getElementById('sdm').value += val;  
}  
  
function clear(){  
    document.getElementById('sdm').value = " ";  
}  
  
function solve(){  
    let x = document.getElementById('sdm').value;  
    let y = eval(x);  
    document.getElementById('sdm').value = y;  
}
```

Output



$$\rightarrow 1 + 9 * 2 / 5 = 4$$

Test cases

1.	value1 = 10 value2 = 5	Addition = 15 Subtraction = 5 Multiplication = 50 Division = 2
2.	value1 = 0 value2 = 5	Addition = 5 Subtraction = 5 Multiplication = 0 Division = 0
3.	value1 = 10 value2 = 0	Addition = 10 Subtraction = 10 Multiplication = 0 Division = Infinity
4.	value1 = abc value2 = 5	Enter valid number

Program 2 :

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

```
<!DOCTYPE HTML>
<html>
<head>
<script>
document.write('h1 align="right"> Squares and Cubes
of the numbers from 0 to 10 </h1>');
document.write('<center><table width = "80%" border = "1"
b
document.write("<tr><th>Number </th><th>Square </th>
<th>Cube </th></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>
```

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

Program 3: Write a JavaScript codes 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.

```
<!DOCTYPE html>
<html>
<body>
<p id = "my P1"> TEXT-GROWING </p>
<p id = "my P2"> TEXT SHRINKING </p>
</body>
<script>
var vsize=10;
var i=0;
var myWait1=setInterval(GrowText1, 100);
function GrowText1()
{
    if(vsize<51)
    {
        vsize=vsize+1;
        document.getElementById("my P1").style.fontSize =
            (vsize+'pt');
        document.getElementById("my P1").style.color ="red";
    }
    else
    {
        vsize=vsize-1;
        document.getElementById("my P1").style.fontSize =
            (vsize+'pt');
        document.getElementById("my P1").style.color ="blue";
    }
}
</script>
```

```
clearInterval(myWait1);
myWait1=setInterval(shrinkText1,100);
document.getElementById("myP1").style.visibility="hidden";
document.getElementById("myP1").style.fontSize="1pt";
document.getElementById("myP2").style.visibility="visible";
}
}
function shrinkText1()
{
if (size>5)
{
size=size-1;
document.getElementById("myP2").style.fontSize=(size+pt);
```

Output:

TEXT GROWING

TEXT SHRINKING

Program 4 : Develop and demonstrate a HTML5 file that includes Java Script which 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

program4.html

```
<!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);
      }
    </script>
```

```
vstr=vstr.toUpperCase();
for(var i=0; i<vstr.length; i++){
    var ch=vstr.charAt(i);
    if(ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')
        break;
}
if(i<vstr.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

Reverse 123456 is 654321

Enter the Input

richannasandra

The position of the
left most vowel is 3

Program 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

```
<?xml-stylesheet="text/css" href="5.css"?>
<!DOCTYPE html>
<html>
  <head>
    <h1> STUDENT DESCRIPTION </h1>
  </head>
  <students>
    <student>
      <USN> USN : A5U17CS001 </USN>
      <name> Name : SANTOSH </name>
      <college> College : SDM IT </college>
      <branch> Branch : Computer Science & Engineering
              </branch>
      <e-mail> E-Mail : santosh@gmail.com </e-mail>
    </student>
  </students>
```

<student>

<USN> USN : 45U17CS002 </USN>

<name> Name : ASUMANTH </name>

<college> College : SDM IT </college>

<branch> Branch : Computer Science & Engineering </branch>

<year> year : 2017 </year>

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

</student>

<student>

<USN> USN : 45U17CS003 </USN>

<name> Name : VANT </name>

<college> College : SDM IT </college>

<branch> Branch : Computer Science & Engineering </branch>

<year> year : 2017 </year>

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

</student>

</students>

<html>

Program5.css

student {

display: block; margin-top: 10px; color: Navy;

}

VSN{

```
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:

STUDENT DESCRIPTION

VSN: SATINTOSH

Name: 4SU17CS001

College: SDMITS

Branch: Computer Science & Engineering

Year: 2017

E-Mail: santosh@gmail.com

USN : A5U17CS002

Name: SUMANTH

College: SDMITS

Branch: Computer Science & Engineering

Year: 2017

E-Mail: usumanth@gmail.com

USN: A5U17CS003

Name: VANI

College: SDMITS

Branch: Computer Science & Engineering

Year: 2017

E-Mail: vani@gmail.com

Program 6 : Write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors, with proper headings.

program 6.php

<?php

```
print "<h3>REFRESH PAGE</h3>";
$name = "counter.txt";
$file = fopen($name, "r");
$hits = fscanf($file, "%d");
fclose($file);
$hits[0]++;
$file = fopen($name, "w");
fprintf($file, "%d", $hits[0]);
fclose($file);
print "Total number of views:". $hits[0];
```

?>

Output :

REFRESH PAGE
Total number of views: 10

Program 7 : Write a PHP program named usates.py that declares a variable usates with value "Mississippi Alabama Texas Massachusetts Kansas", write a PHP program that does the following.

- a) Search for a word in variable usates that ends in as. Store this word in element 0 of a list named usateslist.
- b) Search for a word in usates that begins with h and ends in s. Perform a case-insensitive comparison. Store this word in elements of stateslist.
- c) Search for word in usates that begins with M and ends in s. Store this word in element 2 of the list.
- d) Search for a word in usates that ends in a. Store this word in elements of the list.

Program 7.php

```
<?php  
$usates = "Mississippi Alabama Texas Massachusetts Kansas";  
$usatesArray = [ ];  
$usates1 = explode(' ', $usates);  
echo "Original array: <br>";  
foreach ($usates1 as $i => $value)  
    print("STATE[$i] => $value<br>");  
foreach ($usates1 as $usate){  
    if (preg-match('/xas$/i', ($usate)))  
        $usatesArray[0] = ($usate);  
}
```

```

foreach ($states1 as $vstate) {
    if (preg-match('/^M.*\$1', ($vstate)))
        $statesArray[0] = ($vstate);
}

foreach ($states1 as $vstate) {
    if (preg-match('/.12.*\$1', ($vstate)))
        $statesArray[3] = ($vstate);
}

echo "<br><br> Resultant array: <br>";
foreach ($statesArray as $array => $value)
    print("STATES[$array] = $value <br>");
?>

```

Output

Original array:

STATES[0] = Mississippi

STATES[1] = Alabama

STATES[2] = Texas

STATES[3] = Massachusetts

STATES[4] = Kansas

Resultant array:

STATES[0] = Texas

STATES[1] = Kansas

STATES[2] = Massachusetts

STATES[3] = Alabama

Program 8: Write a PHP program to sort the student records which are stored in the database using selection sort.

Go to Mysql and then type

```
create database weblab;
```

```
use weblab;
```

```
create table student (usn varchar(10), name varchar(20),  
address varchar(20));
```

Program 8.php

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<style>
```

```
table, td, th {  
border: 1px solid black;  
width: 33%;  
text-align: center;  
border-collapse: collapse;  
background-color: lightblue;  
}  
table {margin: auto;}
```

```
</style>
```

```
<?php
```

```
$servername = "localhost";  
$username = "root";  
$password = "root";  
$dbname = "weblab";  
$a = [];
```

```

$conn = mysqli_connect($servername, $username, $password,
                      $dbname);

if ($conn->connect_error)
    die("Connection failed: ". $conn->connect_error);

$sql = "SELECT * FROM student";
$result = $conn->query($sql);

echo "<br>";
echo "<center> BEFORE ISOBMING </center>";
echo "<table border='2'>";
echo "<tr>";
echo "<th>USN </th><th>NAME </th><th>ADDRESS</th>
      </tr>";
if ($result->num_rows > 0)
{
    while ($row = $result->fetch_assoc())
    {
        echo "<tr>";
        echo "<td>". $row["usn"]. "</td>";
        echo "<td>". $row["name"]. "</td>";
        echo "<td>". $row["addr"]. "</td></tr>";
        array_push($a, $row["usn"]);
    }
}
else
{
    echo "Table is empty";
    echo "</table>";
}

```

```

$ n = count($a);
$b = $a;
for ($i=0; $i < ($n-1); $i++) {
    $pos = $i;
    for ($j=$i+1; $j < $n; $j++) {
        if ($a[$pos] > $a[$j]) {
            $pos = $j;
        }
    }
    if ($pos != $i) {
        $temp = $a[$i];
        $a[$i] = $a[$pos];
        $a[$pos] = $temp;
    }
}
$c = [];
$d = [];
$result = $conn->query($sql);
if ($result->num_rows > 0) {
    while ($row = $result->fetch_assoc()) {
        for ($i=0; $i < $n; $i++) {
            if ($row["name"] == $a[$i]) {
                $c[$i] = $row["name"];
                $d[$i] = $row["addr"];
            }
        }
    }
}

```

```

echo "<br>";
echo "<center> AFTER SORTING </center>";
echo "<table border = '2'>";
echo "<tr>";
echo "<th> USN </th> <th> NAME </th> <th> ADDRESS </th> </tr>";
for($i=0; $i < $n; $i++){
    echo "<td>";
    echo "<td>". $a[$i]. "</td>";
    echo "<td>". $c[$i]. "</td>";
    echo "<td>". $d[$i]. "</td></tr>";
}
echo "</table>";
$conn->close();
?>
</body>
</html>

```

Output:

B E F O R E S O R T I N G

USN	NAME	ADDRESS
KISU17CS019	Niranjini	Bengaluru
KISU17CS008	Mareshan	Mysuru
KISU17CS004	Adnusha	Ujire
KISU17CS042	Vanadana	Bethangady

AFTER SORTING

USN	NAMES	ADDRESS
KISU17CS004	cdmusha	Uljire
KISU17CS008	Lavshan	Mysuru
KISU17CS019	Niranjini	Bengaluru
KISU17CS042	Vandana	Beltangadip