Swasthik.D
4SU17CS111
7th Sem
20/12/2020

Web Technology Lab with mini Project

17CSL77

Program - 1

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

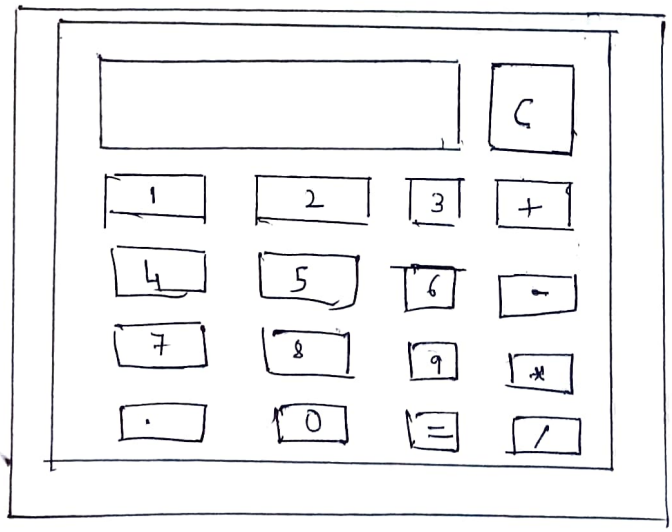
Program1.html

```
<!DOCTYPE>
<html>
<head>
    <form name = "Calculator">
        <table bordir = "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>
    <td><input type = "button" value = "3" onclick = "calculator.
        display.value += '3'"></td>
    <td><input type = "button" value = "+" 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>

<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>

<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 >

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

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

< /tr >
< /table >
< /form >
< /body >
< /center >
< /html >
```

Output:



Test Cases:

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	Value1 = 50.56 Value2 = 24.39	Addition = 74.95 Subtraction = 26.17 Multiplication = 1233.1584 Division = 2.072980	Addition = 74.95 Subtraction = 26.17 Multiplication = 1233.15 Subtraction = 2.072980	PASS
2.	Value1 = 0 Value 2 = 45	Addition = 45 Subtraction = -45 Multiplication = 0 Division = 0	Addition = 45 Subtraction = -45 Multiplication = 0 Division	PASS
3.	Value1 = 45 Value 2 = 0	Addition = 45 Subtraction = 45 Multiplication = 0 Division = Infinity	Addition = 45 Subtraction = 45 Multiplication = 0 Division = Infinity	PASS
4.	Value1 = abc Value2 = 23	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS.
5.	Value 1 = 50 Value 2 = xyz	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS

Program - 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. 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="30%" border="1" bgcolor
                ="white">");
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 code that displays text "TEXT-GROWING" 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.html

```
<!DOCTYPE html>
<html>
 <body>
<p id = "myP1"> TEXT-GROWING . </p>
<p id = "myP2"> TEXTSHRINKING </p></body>
  <script>
  var size = 10;
   var i = 0;
   var myWait1 = setInterval (GrowText1, 100);
   function GrowText1 ()
     {
      if(size < 51)
    {
     size = size + 1;
     document.getElementById ("myP1").style.fontSize = (size + 'pt');
     document.getElementById ("myP1").style.color = "red";
 } else
{
 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 shrinkText()
{
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 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

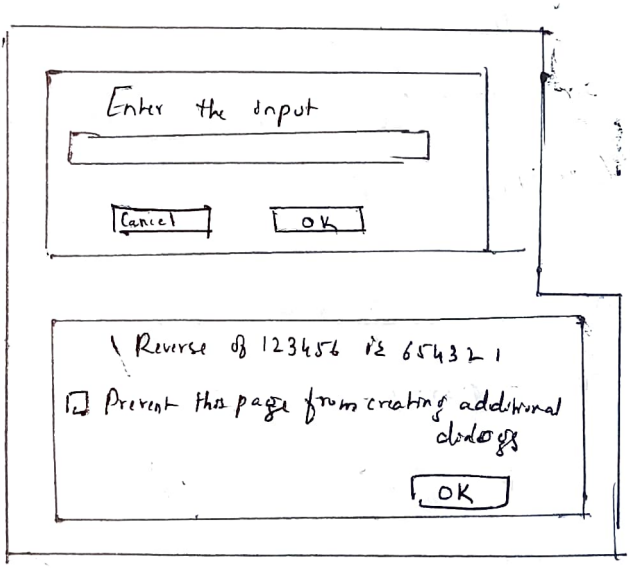
(d) Output : The number with its digits in the reverse order.

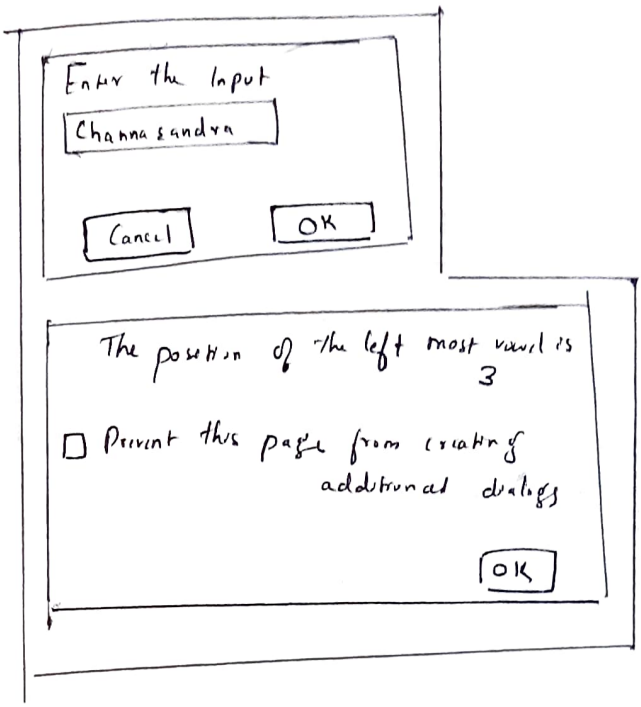
Program 4a.html :

```
<!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);
      }
    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>
```

Output:





Test Cases:

Test No.	Input Parameters	Expected Output	Obtained Output	Remarks
1.	123	Reverse of 123 is 321	Reverse of 123 is 321	PASS
2.	CHANNASANDRA	The position of the left most vowel is 3	The position is the left most vowel is 3.	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

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.

Program5.xml

```
<?xml-stylesheet type="text/css" href="5.css"?>
<!DOCTYPE HTML>
<html>
    <head>
        <h1> STUDENTS DESCRIPTION </h1>
    </head>
    <students>
        <student>
        <USN> USN : 4SU17CS**1 </USN>
        <name> NAME : SWASTHIK </name>
        <college> COLLEGE : SDMIT </college>
        <branch> BRANCH : Computer Science and Engineering
                                    </branch>
        <year> YEAR : 2017 </year>
        <email> E-Mail : swasthik@gmail.com </e-mail>
    </student>
    <student>
```

< USN > USN : 4SU17CS002 < /USN >

< name > NAME : MANORANJAN < /name >

< college > COLLEGE : SDMIT < /college >

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

< year > YEAR : 2017 < /Year >

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

< /student >

< student >

< USN > USN : 4SU17CS003 < /USN >

< name > NAME : CHETHAN < /name >

< college > COLLEGE : SDMIT < /college >

< branch > BRANCH : Computer Science and Engineering

< /branch >

< year > YEAR : 2017 < /Year >

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

< /student >

< /students >

< /html >

Program 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:

STUDENT DESCRIPTION

USN : 4SU17CS111

NAME : SWASTHIK

COLLEGE : SDM IT

BRANCH : Computer Science and Engineering

YEAR : 2017

E-mail : swasthik@gmail.com

USN : 4SU17CS002

NAME : MANORANJAN

COLLEGE : SDMIT

BRANCH : Computer Science and Engineering

YEAR : 2017

E-Mail : manoranjan@gmail.com

USN : 4SU17CS003

NAME : CHETHAN

COLLEGE : SDMIT

BRANCH : Computer Science and Engineering

YEAR : 2017

E-Mail : chethan@gmail.com .

Program - 6

Write a PHP program to keep track of the number of visitors visiting the web page and to display the count of visitors, with proper heading.

program6.php

```
<?php
    print "<h3> REFRESH PAGE </h3>";
    $name = "couter.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 name states.py that declares a variable states with value "Mississippi Alabama Texas Massachusetts Kansas". Write a PHP program that does the following:

a) Search for a word in variable states that ends in xas. Store this word in element 0 of a list named statesList.

b) Search for a word in state the begins with k and ends in s. Perform a case-insensitive comparison.

c) Search for a word in states that begins with M and ends in s. Store this word in element 2 of the list.

d) Search for a word in states that ends in a. Store this word in element 3 of the list.

Program9.php :

```
<?php
    $states = "Mississippi Alabama Texas Massachusetts Kansas";
    $statesArray = [];
    $states1 = explode (' ', $states);
    echo "Original Array : <br>";
    foreach ($states1 as $i => $value)
        print ("$STATE[$i] : $value <br>");
    foreach ($states1 as $state) {
        if (preg_match ('/xas$/', ($state)))
    }       $statesArray[0] = ($state);
```

```
foreach ($states1 as $state) {
    if(preg_match ('/^k.*s$/i', ($state)))
    $statesArray[1] = ($state);
}
foreach ($states1 as $stat) {
    if(preg_match ('/^M.*s$/', ($state)))
    $statesArray[2] = ($state);
}
foreach ($states1 as $state) {
    if (preg_match ('/a$/', ($state)))
    $statesArray[3] = ($state);
}
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 : light blue;
          }
          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 SORTING </center>";
echo "<table border = '2'>";
echo "<tr>";
echo "<th> USN </th><th> NAME </th><th> Addrs,
                                    </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["usn"] == $a[$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 "<tr>";
    echo "<td>". $a[$i]."</td>";
    echo "<td>". $c[$i]."</td>";
    echo "<td>". $d[$i]."</td></tr>";
    }
  echo "</table>";
   $conn -> close();
    ?>
</body>
</html>
```

Output:

BEFORE SORTING

USN	NAME	Address
4SU17CS019	Niranjini	Bangalore
4SU17CS008	Darshan	Mysuru
4SU17CS004	Anusha	Ujire
4SU17CS042	Vandana	Belthangady

AFTER SORTING

USN	NAME	Address
4SU17CS004	Anusha	Ujire
4SU17CS008	Darshan	Mysuru
4SU17CS019	Niranjini	Bengaluru
4SU17CS042	Vandana	Belthangady