

WEB TECHNOLOGY LABORATORY WITH MINI PROJECT

Program - 117CSL77

Javascript : simple calculator.

```

<!DOCTYPE html>
<html>
<head>
<title> Lab calculator program </title>
<style>
.title {
    position: relative;
    top: 25px;
    border-radius: 10px;
    margin-bottom: 50px;
    text-align: center;
    width: 400px;
    color: #ff4446;
    border: dashed green 2px;
}

input[type="text"] {
    border-radius: 10px;
    text-align: right;
    border-color: black;
    background-color: white;
    width: 95px;
}

input[type="button"] {
    border-radius: 10px;
    background-color: darkseagreen;
    color: black;
    border-color: darkseagreen;
    width: 100px;
}
</style>

```

<script>

```
function disp(val){  
    document.getElementById('sdm').value+=val;  
}
```

```
function circ(){  
    document.getElementById("sdm").value = ""  
}
```

```
function solve(){  
    let x = document.getElementById('sdm').value;  
    let s = eval(x);  
    document.getElementById('sdm').value = s;  
}
```

</script>

<head>

<body>
 <center>
 <div class="title"> SDM </div>

<table border="1">

<tr>

<td>

<input type="button" value="c" onclick="circ()"/>

</td>

<td colspan="3">

<input type="text" id="sdm"/>

</td>

</tr>

<tr>

<td>

<input type="button" value="+" onclick="disp('+')"/>

</td>

```
<td>
<input type="button" value="1" onclick="disp('1')"/>
</td>
<td>
<input type="button" value="2" onclick="disp('2')"/>
<input type="button" value="3" onclick="disp('3')"/>
</td>
<td>
<input type="button" value="-" onclick="disp('-')"/>
<input type="button" value="4" onclick="disp('4')"/>
<input type="button" value="5" onclick="disp('5')"/>
<input type="button" value="6" onclick="disp('6')"/>
<input type="button" value="*" onclick="disp('*')"/>
<input type="button" value="/" onclick="disp('/')"/>
</td>
<td>
```

```
<td>
<input type="button" value="8" onclick="disp('8')"/>
</td>

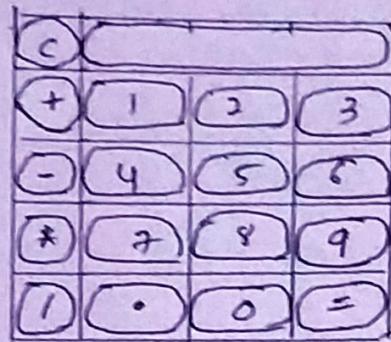
<td>
<input type="button" value="9" onclick="disp('9')"/>
</td>

</tr>

<tr>
<td>
<input type="button" value="1" onclick="disp('1')"/>
</td>
<td>
<input type="button" value="." onclick="disp('.')"/>
</td>
<td>
<input type="button" value="0" onclick="disp('0')"/>
</td>
<td>
<input type="button" value="=" onclick="solve()"/>
</td>
<td>
</td>
</tr>

</table>
</body>
</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=2.0729807298	Addition=74.95 Subtraction=26.17 Multiplication=1233.1584 Division=2.0729807298X	Pass
2.	value1=0 value2=45	Addition=45 Subtraction=-45 Multiplication=0 Division=0	Addition=45 Subtraction=-45 Multiplication=0 Division=0	(Pass)
3.	value1=abc value2=23	ENTER VALID NUMBER	Enter valid number	Pass

Program ②

Write a javascript that calculates the square and cube of the number from 0 to 10 and outputs HTML text that displays the resulting values in an HTML table format.

```
<html>
<head>
<script>
document.write('<h1 align="right"> square and cubes  
of the numbers from 0 to 10 </h1>');
document.write('<center><table width="80%" border="1"  
bgcolors="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:

Square and cube of the numbers from 0 to 10

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

HTML5 and javascript :

- (a) position in the string of the left-most vowel
- (b) number with its digit in the reverse order

```
<!DOCTYPE HTML>

<html>
<head>
<title> Program 5 </title>
</head>
<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 char = str.charAt(i);
        if (char == 'A' || char == 'E' || char == 'I' ||
            char == 'O' || char == 'U') {
            break;
        }
    }
}
```

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

Output :-

(a)

Enter the input

OK Cancel

REVERSE OF 123 IS 321

OK

(b)

Enter the input

OK Cancel

The position of the left vowel is A

OK

Program-4

write a javascript code that display text "TEXT-GROWING" with increase font size in the interval of 100ms in RED COLOR , when the font size reaches 50pt it display "TEXT-SHRINKING" in BLUE color . then font size decreases to 5pt

Program

```
<html>
<head>
    <title>Text growing and text shrinking </title>
</head>
<body>
    <h1 align="center"><h1>
    <script>
        var fs = 5;
        var flag = 0;
        var t = document.querySelector('h1');
        function inc()
        {
            fs++;
            fs1 = fs + "pt";
            t.style.color = "red";
            t.style.fontSize = fs1;
            t.textContent = "TEXT-GROWING";
            if (fs == 50)
            {
                flag = 1;
            }
        }
    </script>

```

function decrement()

{

fs -= 5;

fs1 = fs + "pt";

t.textContent = "TEXT-SHRINKING";

t.style.color = "blue";

t.style.fontSize = fs1;

if (fs == 5)

{

flag = 0;

}

}

function call()

{

if (flag == 1)

{

decrement();

}

if (flag == 0)

{

print();

}

}

setInterval (call, 100);

<script>

</body>

</html>

Output

TEXT - GROWING

TEXT - SHRINKING.

Diagram

Program - 5

write a PHP program to keep track of the number of visitors visiting the web page and to display this count of visitors with the program header.

```
<html>
<head>
<title> VISITORS COUNT </title>
</head>
<body align="center" bgcolor="green">
<h1 align="center"> Refresh web page </h1>
<?php
$filename = 'count.txt';
$fp = fopen($filename, "r");
$hits = fscanf($fp, "%d");
$hits[0] = $hits[0] + 1;
print "No. of visitors visiting this web page $hits[0]\n";
fclose($fp);
$fp = fopen($filename, "w");
printf($fp, "%d", $hits[0]);
fclose($fp);
?>
</body>
</html>
```

Output

Refresh web page

No. of visitors this webpage 10

Program - 6

Design an XML document to store information about a student in a engineering college affiliated to VTU. The information must include USN, Name and name of 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

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

<!DOCTYPE HTML>

<html>
  <head>
    <h1> Student Description </h1>
  </head>
  <students>
    <Student>
      <USN> USN: 4SUI7CS001 </USN>
      <name> NAME: Santhosh </name>
      <college> COLLEGE: SDMIT </college>
      <branch> BRANCH: CSE </branch>
      <year> YEAR: 2017 </year>
      <email> E-mail: santhosh@gmail.com </email>
    </Student>
  </students>
</html>
```

<student>

<USN> USN: 4SUI17CS003 </USN>

<name> NAME: MANORANJAN </name>

<college> COLLEGE: SDMITS </college>

<branch> BRANCH: CSE </branch>

<year> YEAR: 2017 </year>

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

</student>

<student>

<USN> USN: 4SUI17CS003 </USN>

<name> NAME: CHETHAN </name>

<college> COLLEGE: SDMITS </college>

<branch> BRANCH: CSE </branch>

<year> YEAR: 2017 </year>

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

</student>

</student>

</html>

SCSS

```
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;  
}  
  
years {  
    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: 4SU17CS001

NAME: Santhosh

COLLEGE: SDM IT

BRANCH: CSE

YEAR: 2017

E-mail: Santhosh@gmail.com

USN: 4SU17CS002

NAME: MANO RAJAN

COLLEGE: SDM IT

BRANCH: CSE

YEAR: 2017

E-mail: manorajan@gmail.com

USN: 4SU17CS 003

NAME: CHE THAN

COLLEGE: SDM IT

BRANCH: CSE

YEAR: 2017

E-mail: chethan@gmail.com

Program -7

write a PHP program to display a digital clock which displays
the current time of the server

Program

```
<html>
  <head>
    <meta http-equiv="refresh" content="1" />
  </head>
  <body align="center">
    <h1 align="center"> Digital clock <h1>
    <?php
      date_default_timezone_set("Asia/Kolkata");
      print date("h:i:s a");
    ?>
  </body>
</html>
```

Output

Digital clock

10:44:08 AM

Program-8

LCT

8) write the PHP programs to do the following:

- (a) implement simple calculator operations.
- (b) find the transpose of a matrix
- (c) multiplication of two matrix
- (d) addition of two matrix.

<html>

<head>

<style>

```
table,td,th
{
    border: 1px solid black;
    width: 35px;
    text-align: center;
    background-color: darkgray;
}
table {margin: auto;}
input, p {text-align: right;}
```

</style>

</head>

<body>

<form method="POST">

<table>

<tr> <td> First Number : </td>

<td> <input type="text" name="num1" /> </td>

<td rowspan="2"> <input type="submit" name="submit" value="calculated" /> </td>

name="submit" value="calculated" /> </td>

2013-14 वर्ष की संख्या 2013

यहाँ सिर्फ अपेक्षित गणना को दर्शाता है।

2/103

2/103

2/103

34 (1000/1000) का गुणा (1000/1000)

{

अभीष्ट = 34 × 1000/1000

अभीष्ट = 34 × 1000/1000

यहाँ 1000 का गुणा के लिए इसके गुणा के लिए

किसी भी अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए तो अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए तो अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए तो अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए तो अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए तो अंक का गुणा करने की विधि का उपयोग किया जा सकता है।

जब भी 1000 का गुणा करना चाहिए

अभीष्ट

अभीष्ट = 34 × 1000/1000

}

?

अभीष्ट

2/103

olp

Olpa
V2 PHP

First Number:	50	
Second Number:	25	
Addition:	75	<u>Calculate</u>
Subtraction:	25	
Multiplication:	1250	
Division:	2	

Test no	Input Parameters	Expected OLP	Obtained OLP	Remark
1	value1=50.56 value2=24.37	Addition = 74.93 Subtraction = 26.17 Multiplication = 1233.1584 Division = 0.0729503291	Addition = 74.97 Subtraction = 26.17 Multiplication = 1233.1584 Division = 0.0729503291	Pass
2	value1=6 value2=95	Addition = 95 Subtraction = -89 Multiplication = 0 Division = 0	Addition = 95 Subtraction = -89 Multiplication = 0 Division = 0	Pass
3	value=abc value=53	Enter valid number	Enter valid number	Fail
4	value1=0 value2=45	Enter valid number	Enter valid number	Pass

Program 4b

21 PHP

```
$a = array(array(1,2,3),array(4,5,6),array(7,8,9));
$b = array(array(9,8,7),array(6,5,4),array(3,2,1));
```

\$m = count(\$a);

\$n = count(\$a[0]);

\$p = count(\$b);

\$q = count(\$b[0]);

echo "The first matrix is T $\begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{pmatrix}$ ";

for (\$row=0; \$row < \$m; \$row++) {

 for (\$col=0; \$col < \$n; \$col++) {

 echo " a [" . \$row ."][\$col]";

 echo "

}

echo "The second matrix is T $\begin{pmatrix} 9 & 6 & 3 \\ 8 & 5 & 2 \\ 7 & 4 & 1 \end{pmatrix}$ ";

for (\$row=0; \$row < \$p; \$row++) {

 for (\$col=0; \$col < \$q; \$col++) {

 echo " b [" . \$row ."][\$col]";

 echo "

}

echo "The transpose for the first matrix is T $\begin{pmatrix} 1 & 4 & 7 \\ 2 & 5 & 8 \\ 3 & 6 & 9 \end{pmatrix}$ ";

for (\$row=0; \$row < \$m; \$row++) {

 for (\$col=0; \$col < \$n; \$col++) {

 echo " a [" . \$row ."][\$col]";

 echo "

}

if (\$m == \$p) and (\$n == \$q) {
 echo "the addition of matrices is ". "< b1 >";
 for (\$row=0; \$row<\$b; \$row++) {
 for (\$col=0; \$col<\$b; \$col++) {
 echo " ". \$a[\$row][\$col] + \$b[\$row][\$col] . " ";
 }
 }
}

if (\$n == \$p) {
 echo "the multiplication of matrix : ". "< b2 >";
 \$result = array();
 for (\$i=0; \$i<\$m; \$i++) {
 for (\$j=0; \$j<\$q; \$j++) {
 \$result[\$i][\$j] = 0;
 for (\$k=0; \$k<\$n; \$k++) {
 \$result[\$i][\$j] += \$a[\$i][\$k] * \$b[\$k][\$j];
 }
 }
 }
}

for (\$row=0; \$row<\$m; \$row++) {
 for (\$col=0; \$col<\$q; \$col++) {
 echo " ". \$result[\$row][\$col] . "
 }
}

Q/P

the first matrix

$$\begin{matrix} 1 & 2 & 3 \end{matrix}$$

$$\begin{matrix} 4 & 5 & 6 \end{matrix}$$

$$\begin{matrix} 7 & 8 & 9 \end{matrix}$$

the second matrix

$$\begin{matrix} 7 & 8 & 9 \end{matrix}$$

$$\begin{matrix} 2 & 5 & 6 \end{matrix}$$

$$\begin{matrix} 1 & 2 & 3 \end{matrix}$$

the transpose of the first matrix:

$$\begin{matrix} 1 & 4 & 7 \end{matrix}$$

$$\begin{matrix} 2 & 5 & 8 \end{matrix}$$

$$\begin{matrix} 3 & 6 & 9 \end{matrix}$$

the addition of matrix 23:

$$\begin{matrix} 8 & 10 & 12 \end{matrix}$$

$$\begin{matrix} 8 & 10 & 12 \end{matrix}$$

$$\begin{matrix} 8 & 10 & 12 \end{matrix}$$

the multiplication of matrix 1:

$$\begin{matrix} 18 & 24 & 30 \end{matrix}$$

$$\begin{matrix} 54 & 69 & 84 \end{matrix}$$

$$\begin{matrix} 90 & 114 & 138 \end{matrix}$$