

WEB TECHNOLOGY LABORATORY WITH
MINI PROJECT - 17CSL77

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(a) Implement simple calculator operations
(b) Find the transpose of a matrix, multiplication of two matrices and addition of two matrices.
- (9) program 9:- PHP:- program with variable States with value "Mississippi Alabama Texas Massachusetts Kanai"
- (10) program 10:- PHP:- program to sort the student records using selection sort. $\Rightarrow \textcircled{18}$

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

program 1. html

```
<!DOCTYPE>
<html>
<head>
<title> Web Lab Program 1 </title>
<style>
body{
    text-align: center;
}
.title {
    border-radius: 45px;
    margin-bottom: 30px;
    text-align: center;
    padding: 14px 13px;
    width: 1000px;
    color: red;
    background-color: red;
    border: solid black 2px;
}
input[type = "text"] {
    border-radius: 10px;
    text-align: right;
    background-color: gold;
    width: 94%;
}
```

```
input [type = "button"] {  
    border-radius: 20px;  
    background-color: blue;  
    color: white;  
    border-color: white;  
    width: auto;  
}  
• title {  
    border-radius: 45px;  
    margin-bottom: 30px;  
    text-align: center;  
    width: 150px;  
    color: red;  
    background-color: pink;  
    border: solid black 3px;  
}  
</style>  
<Script>  
function disp(val){  
    document.getElementById('SDM').value += val;  
}  
function clr(){  
    document.getElementById('SDM').value = "";  
}  
function solve(){  
    let x = document.getElementById('SDM').value;  
    let y = eval(x);  
    document.getElementById('SDM').value = y;  
}  
</Script>  
<head>  
<body>
```

<div class = "title"> SDM JAVASCRIPT LAB PROGRAMS </div>

<center>

<table border = "10">

<tr>

<td>

<input type = "button" value = "CE" onclick = "clr()"/>

</td>

<td colspan = "4">

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

</td>

<tr>

<td>

<td>

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

</td>

<td>

<input type = "button" value = "1" onclick = "disp('1')"/>

</td>

<input type = "button" value = "2" onclick = "disp('2')"/></td>

<input type = "button" value = "3" onclick = "disp('3')"/></td>

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

<td><input type = "button" value = "4" onclick = "disp('4')"/></td>

<td><input type = "button" value = "5" onclick = "disp('5')"/></td>

<td><input type = "button" value = "6" onclick = "disp('6')"/></td>

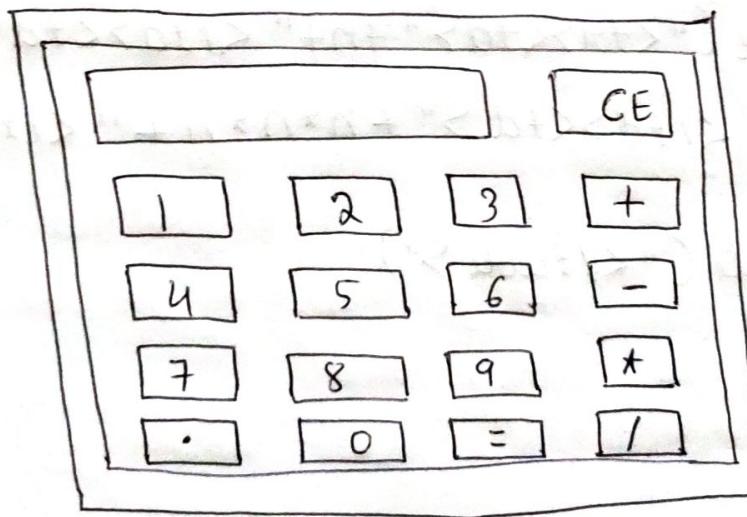
</tr>

<tr>

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

```
<td><input type="button" value="7" onclick="disp('7')"></td>
<td><input type="button" value="8" onclick="disp('8')"></td>
<td><input type="button" value="9" onclick="disp('9')"></td>
<br>
<br>
<td><input type="button" value="/" onclick="disp('/')"></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="disp('-')"></td>
<br>
</table>
</center>
</body>
</html>
```

O/p:



(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.

program2.html

```
<!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="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>
```

O/P:

Numbers FROM 0 TO 10 with their SQUARES AND CUBES

Number	squares	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 java script 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>
<head>
<title>JS TEXT PROGRAM </title>
</head>
<body>
<div style="margin-top: 200px;" align="center">
<p></p>
</div>
<script>
var text = document.querySelector('p')
var font = 5;
var flag = 0;
function inc() {
    font++;
    text.style.fontSize = font + "pt";
    text.style.color = "red";
    text.textContent = "Text - GROWING;" + font + "pt";
    if (font == 50) {
        flag = 1;
    }
}
}
```

```
function dec() {
    font--;
    text.style.fontSize = font + "pt";
    text.style.color = "blue";
    text.textContent = "TEXT-SHRINKING:" + font + "pt";
    if (font == 5) {
        flag = 0;
    }
}
```

```
var time = setInterval(function() {
```

```
    if (flag == 1) {
```

```
        dec();
```

```
}
```

```
    if (flag == 0) {
```

```
        inc();
```

```
}
```

```
} 100);
```

```
</script>
```

```
<body>
```

```
</html>
```

O/P:

TEXT-GROWING

TEXT SHRINKING

(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 left its digits in the reverse order.

Program 4.html

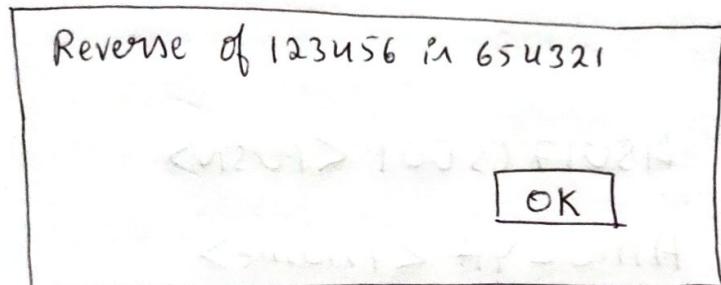
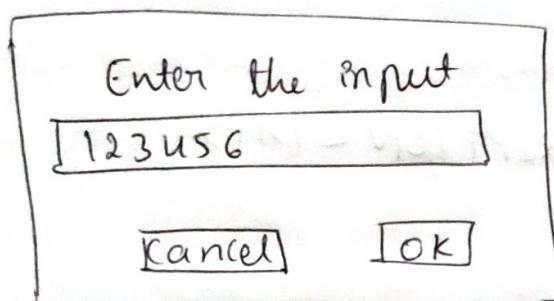
Note: isNaN function return true
if the argument is not a no.)

```
<!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;
        }
      }
    </script>
  </body>
</html>
```

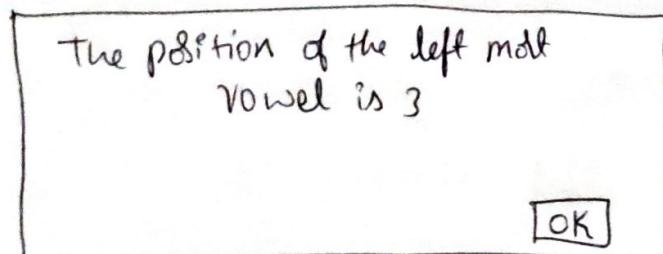
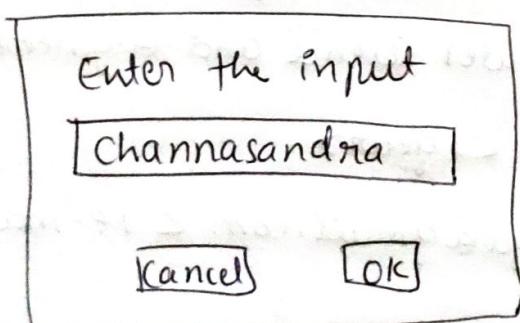
```
3
    if (i < str.length)
        alert("The position of the left most vowel is " + (i+1));
    else
        alert("No vowel found in the entered string");
3
```

```
</script>
</body>
</html>
```

O/P:



O/P:



(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 s.xml

```
<?xml-stylesheet type = "text/css" href = "5.css"?>
<!DOCTYPE HTML>
<html>
  <head>
    <h1> STUDENTS DESCRIPTION </h1>
  </head>
  <students>
    <student>
      <USN> USN : 4SU17CS001 </USN>
      <name> NAME : AMULYA </name>
      <college> COLLEGE : SDM IT </college>
      <branch> BRANCH : Computer Science and Engineering </branch>
      <year> YEAR : 2017 </year>
      <e-mail> E-mail : amulya@gmail.com </e-mail>
    </student>
  </students>
```

<student>

<usn> USN : USU17CS002 </usn>

<name> NAME : BINDU </name>

<college> COLLEGE : SDMIT </college>

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

<year> YEAR : 2017 </year>

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

</student>

<student>

<usn> USN : USU17CS003 </usn>

<name> NAME : CHINMAY </name>

<college> COLLEGE : SDMIT </college>

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

<year> YEAR : 2017 </year>

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

</student>

</student>

</html>

programs.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;  
}
```

O/P:

STUDENT DESCRIPTION

USN: USU17CS001

NAME: AMULYA

COLLEGE: SDMIT

BRANCH: Computer Science and Engineering

YEAR: 2017

E-mail: amulya@gmail.com

USN: USV17CS002

NAME: BINDU

COLLEGE: SDM IT

BRANCH: Computer Science and Engineering

YEAR: 2017

E-Mail: bindu@gmail.com

USN: USV17CS003

NAME: CHINMAY

COLLEGE: SDM IT

BRANCH: Computer Science and Engineering

YEAR: 2017

E-mail: chinmay@gmail.com

(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 headings.

program6.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];  
?>
```

Op:

REFRESH PAGE

Total number of views: 10

(7) Write a PHP program to display a digital clock which displays the current time of the server.

program7.php

```
<!DOCTYPE HTML>
<html>
<head>
<meta http-equiv="refresh" content="1" />
<style>
p {
    color: 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>
```

010:

10:44:08 AM

(10) Write a PHP program to sort the student records which are stored in the database using selection std.

Goto Mysql and then type

```
Create database weblab;  
use weblab;
```

```
Create table Student (usn varchar(10), name varchar(20),  
address varchar(20));
```

Program 10.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 = [];
```

// Create Connection

// opens a new connection to the MySQL server
`$Conn = mysqli_connect($servername, $username,
 $password, $dbname);`

// check connection and return an error description
 from the last connection error, if any
`if ($conn->connect_error)
 die("Connection failed: " . $conn->connect_error);`

\$sql = 'SELECT * FROM student';

// performs a query against the database
`$result = $conn->query($sql);`
`echo "
";`
`echo "<center> BEFORE SORTING </center>";`
`echo "<table border='1'>";`
`echo "<tr>";`
`echo "<th> USN </th> <th> NAME </th>";`
`echo "<th> Address </th> </th> </th>";`
`if ($result->num_rows > 0)`
`{`

// output data of each row and fetches a result row
 as an associative array
`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 ($result -> num_rows > 0) // output data of each row
    {
        while ($row = $result -> fetch_assoc())
        {
            for ($i=0; $i < $n; $i++)
            {
                if ($row["vsn"] == $a[$i])
                {
                    $c[$i] = $row["name"];
                    $d[$i] = $row["addr"];
                }
            }
        }
    }
}

```

```

echo "<br>";
echo "<center>AFTER SORTING <center>;"
echo "<table border='1'>";
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>

```

O/P:

Before Sorting

USN	NAME	Address
USU17CS011	Amulya	Bengaluru
USU17CS002	Bindu	Mysuru
USU17CS005	chandana	Mysore
USU17CS015	Deeksha	Kundapura

After sorting

USN	NAME	Address
USU17CS003	Bindu	Mysuru
USU17CS005	chandana	Mysore
USU17CS011	Amulya	Bengaluru
USU17CS015	Deeksha	Kundapura