

(1)

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HSU17CS113

Web Technology Lab with  
Mini Project  
17CSL77  
Observation:

1. Write a JavaScript to design a calculator to perform the following operations: sum, product, difference and quotient.

program1.html

```

<!DOCTYPE>
<html>
<head>
  <link rel="stylesheet" href="sty.css"/>
</head>
<center>
<body>
  <form name="calculator">
    <table border="3">
      <tr><td colspan="4"><input name="display" id="display" type="text" value="0" 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>
      <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>
      </tr>
      <tr>
        <td colspan="4" style="height: 40px; vertical-align: top;">
          <input type="button" value="." onclick="calculator.display.value += '.'" style="width: 100%; height: 100%; font-size: 2em; border: none; background-color: #f0f0f0; padding: 0; margin: 0;">
        </td>
      </tr>
    </table>
  </form>
</body>
</html>

```

⑧

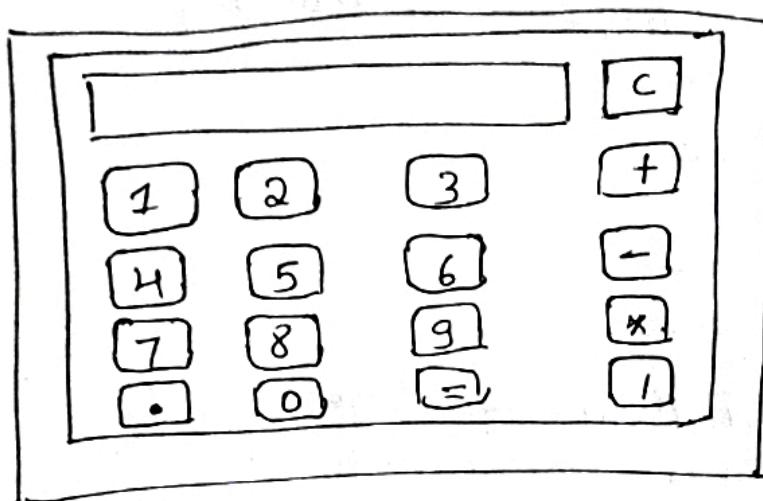
```
<tr>
    <td><input type="button" value="4" onclick="calculator.
        display.value += '4'"></td>
    <td><input type="button" value="5" onclick="calculator.
        display.value += '5'"></td>
    <td><input type="button" value="6" onclick="calculator.
        display.value += '6'"></td>
    <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>
</tr>
<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="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 mul = 1233.1584 Div = 2.072980729 807298.	Addition = 74.95 Subtraction = 26.17 mul = 1233.1584 Div = 2.072980729 807298.	PASS.
2.	Value1=0 Value2=45.	Addition = 45. Subtraction = 45 mul = 0 Div = 0.	Addition = 45. Subtraction = 45 mul = 0 Div = 0	PASS
3	value = 45 Value = 0.	Addition = 45 Subtraction = 45 mul = 0 Division = Infinity	Addition = 45 Subtraction = 45 Mul = 0 Division = Infinity	PASS

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	value1 value2=23	ENTER VALID NUMBER	ENTER VALID NUMBER	PAGE
5.	value1=50 value2=xyz	ENTER VALID NUMBER	ENTER VALID NUMBER	PAGE

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

program2.html

```

<html>
<head>
<script>
document.write ('<ht align="right">Squares and Cubes of the
numbers from 0 to 10</ht>');
document.write ('<center><table width="130%" border="1"
bgcolor="#white">');
for (var n=0; n<=10;n++)
{
  document.write ('<tr><td>' + n + '</td><td>' + n * n + '</td>');
  document.write ('<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

- 3) Develop and demonstrate a HTML file that includes JavaScript script 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 with its digits in the reverse order.

Program3.html.

```
<!DOCTYPE HTML>
```

```
<html>
```

```
<body>
```

```
<script type="text/javascript">
```

```
var str = prompt("Enter the Input", "");
```

⑥

```
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;
    }
    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

Reverse of 123456 is 654321

Prevent this page from addition dialogs.

Enter the Input

The position of the left most vowel is 3

Prevent this page from creating additional dialogs

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## 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 of 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.

- 4) Write a JavaScript code that displays text "TEXT-GROWING" with increasing font size in the interval of 100 ms in RED COLOR, when the font size reaches 5pt it displays "TEXT-SHRINKING" in BLUE color. Then the font size decreases to 5pt.

programB.html

```
<!DOCTYPE html>
<html>
<body>
<p id="myP1">TEXT-GROWING</p>
<p id="myP2">TEXT-SHRINKING</p>
</body>
```

&lt;script&gt;

//Global declarations.

var size = 10;

var i = 0;

var myWait = setInterval(showText1, 100);

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```

function GrowTextI()
{
  if(size<5)
  {
    size=size+1;
    document.getElementById("myP1").style.fontSize=(size+'pt');
    document.getElementById("myP1").style.color="red";
    //Hide the paragraph "text-shrinking" document.getElementById("myP2").style.visibility="hidden";
  }
  else
  {
    clearInterval(myWaitI);
    myWaitI=setInterval(SheenkTextI,100);
    //Now hide the 1st paragraph and display the second paragraph
    document.getElementById("myP1").style.visibility="hidden";
    document.getElementById("myP1").style.fontSize='1pt';
    document.getElementById("myP2").style.fontSize='1pt';
    document.getElementById("myP2").style.visibility="visible";
  }
}

```

```
function SheenkTextI()
```

```

{
  if(size>5)
  {
    size=size-1;
    document.getElementById("myP2").style.fontSize=(size+'pt');
    document.getElementById("myP2").style.color="blue";
  }
}

```

Output →

TEXT-GROWINh.

TEXT-SHRINKING.

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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 e-mail id. Make up sample data for 3 students. Create a CSS style sheet and use it to display the documents.

program 5.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 : SANTHOSH </name>
      <college>COLLEGE: SDMITE </college>
      <branch>BRANCH : Computer Science and Engineering </branch>
      <year>YEAR : 2017 </year>
      <e-mail>E-Mail: santhosh@gmail.com </e-mail>
    </student>
    <student>
      <USN>USN : 4SU17CS002 </USN>
      <name>NAME : MANDRANIAN </name>
      <college>COLLEGE: SDMIT </college>
      <branch>BRANCH : Computer Science and Engineering </branch>
      <year>YEAR : 2017 </year>
      <e-mail>E-Mail: monsoonjan@gmail.com </e-mail>
    </student>
    <student>
      <USN>USN : 4SU17CS003 </USN>
      <name>NAME : CETHAN </name>
      <college>COLLEGE: SDMIT </college>
```

```

<branch>BRANCH : Computer Science and Engineering
</branch>
<year>YEAR : 2017 </year>
<email>E-mail : chethan@gmail.com </e-mail>
<student>
<student>
</html>

```

programs.css

student {

display: block;

}

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;

}

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Output →

STUDENT DESCRIPTION

USN: HSU17CS001

NAME: SANTHOSH

COLLEGE: SDM IT.

BRANCH: Computer Science and Engineering

YEAR: 2017

E-Mail: santhosh@gmail.com

USN: HSU17CS002

NAME: MANORANJAN

COLLEGE: SDM IT.

BRANCH: Computer Science and Engineering.

YEAR: 2017

E-Mail: manoranjan@gmail.com

USN: HSU17CS003

NAME: CHETHAN

COLLEGE: SDM IT.

BRANCH: Computer Science and Engineering.

YEAR: 2017

E-Mail: chethan@gmail.com.

- 6) Wrote 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.

program6.php

<?php

print "<h3> REFRESH PAGE </h3>";

\$name = "counter.txt";

\$file = fopen (\$name, "r");

\$hits = fscanf (\$file, "%d");

fclose (\$file);

```

    $hits[$id]++;
    $file = fopen($name, "w");
    fprintf($file, "%d", $hits[$id]);
    fclose($file);
    printf("Total number of views %d, file %s\n");
}

```

??

Output ->

REFRESH PAGE  
Total number of views : 10

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

program 7.php

```

<!DOCTYPE HTML>
<html>
<head>
<meta http-equiv="refresh" content="1" />
<style>
    p {
        color: white;
        font-size: 50px;
        position: absolute;
        top: 50%;
        left: 50%;
        transform: translate(-50%, -50%);
    }

```

body { background-color: black; }

```

</style>
<p><?php echo date("h:i:s A"); ?></p>
</head>

```

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Output →

10:44 : 08 AM

- 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));

Program8.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.
    
```

```

$conn = mysqli_connect ($username, $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 "<br>";
echo "<center>BEFORE SORTING </center>";
echo "<table border='2'>";
echo "<tr>";
echo "<th>USN</th><th>NAME</th><th>Address</th></tr>";
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>". $row["Address"] . "</td></tr>";
        array_push ($a, $row["USN"]);
    }
}
else
{
    echo "Table is Empty";
    echo "<table>";
    $n = count ($a);
    $t = $a;
    for ($i = 0; $i < ($n - 1); $i++)
    {
        $pos = $i;

```

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```
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["USN"] == $a[$i]) {
                $c[$i] = $row["name"];
                $d[$i] = $row["address"];
            }
        }
    }
    echo "<body>";
    echo "<center> AFTER SORTING </center>";
    echo "<table border='2'>";
    echo "<tr>";
    echo "<th> USN </th> <th> NAME </th> <th> Address </th> </tr>";
    for ($i=0; $i < $n; $i++) {
        echo "<tr>";
        echo "<td>" . $a[$i] . "</td>";
        echo "<td>" . $c[$i] . "</td>";
        echo "<td>" . $d[$i] . "</td>";
    }
}
```

```

echo "<td>". $d[$i]. "</td></tr>";
}
echo "</table>";
$conn->close();
?>
</body>
</html>

```

Output →

### BEFORE SORTING

| USN        | NAME      | Address    |
|------------|-----------|------------|
| 4SU17CS019 | Niranjini | Bengaluru  |
| 4SU17CS008 | Daeshan   | Mysuru     |
| 4SU17CS004 | Anusha    | Ujjire     |
| 4SU17CS042 | Vandana   | Bethangady |

### AFTER SORTING

| USN        | NAME      | Address     |
|------------|-----------|-------------|
| 4SU17CS004 | Anusha    | Ujjire      |
| 4SU17CS008 | Daeshan   | Mysuru      |
| 4SU17CS019 | Niranjini | Bengaluru   |
| 4SU17CS042 | Vandana   | Bethangady. |