

Web Technology & Its Application (17CSH77)

1. Write a Javascript to design a simple calculator to perform the following operations: sum, product, difference & quotient.

```

<!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" 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 = "-" onclick = "calculator
              .display.value += '-'></td>
            <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>
          </tr>
        </table>
      </form>
    </body>
  </center>
</html>

```

<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="/" 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>

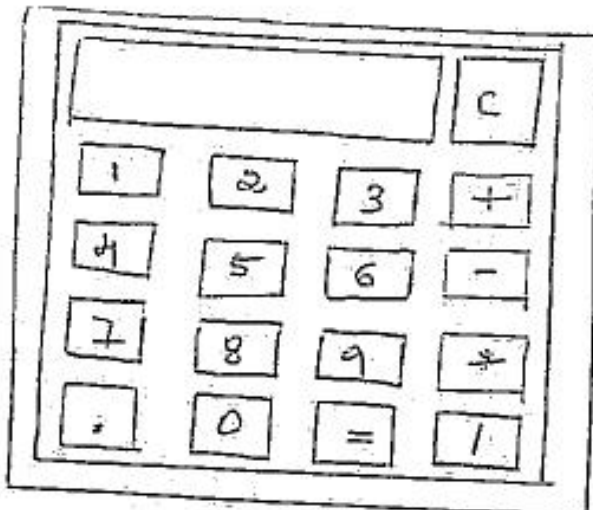
</tr>

```

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

```

Output



Test Cases

Test No.	Input parameters	Expected Output	Obtained Output	Remarks
1.	value1 = 50.56 value2 = 24.37	Addition = 74.95 Subtraction = 26.17 Multiplication = 1233.1584 Division = 2.072980	Addition = 74.95 Subtraction = 26.17 Multiplication = 1233.1584 Division = 2.072980729	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 = 45 value2 = 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.	value1 = 50 value2 = xyz	ENTER VALID NUMBER	ENTER VALID NUMBER	PASS

Program 2

2. Write a Javascript that calculates the square & cube of the number from 0 to 10 & outputs HTML text that displays the resulting value in an HTML table format.

```
= <html>
  <head>
  <script>
    document.write ('<h1 align = "right"> square and cube of
                     the number 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

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 font size decreases to 5pt.

program 3.html

```
<!DOCTYPE html>
<html>
<body>
<p id = "myP1">TEXT_GROWING </p>
<p id = "myP2">TEXT_SHRINKING </p></body>
<script>
//Global declarations
var size = 10;
var i = 0;
var mywait1 = setInterval(GrowText, 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 ShrinkText1()
```

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

output

TEXT-GROWING

TEXT SHRINKING

Program #1

1. Develop & demonstrate a HTML5 file that includes Javascript 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.

```
<!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 char = str.charAt(i);
```

```
    if (char == 'A' || char == 'E' || char == 'I' || char == 'O' || char == 'U')
```

```
        break;
```

```
}
```

```
if (ix 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

123456

Cancel OK

Reverse of 123456 is 654321

☐ Prevent this page from creating additional dialogs

OK

Enter the input

channasandee

Cancel OK

The position of the left most vowel is 3

☐ Prevent this page from creating additional dialogs

OK

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	CHANNASANDR A	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

Program 5

5. Design an XML document to store information about a student in an engineering college affiliated to VTU. The information must include USN, Name & Name of the college, Branch, Year of joining & email id. Makeup sample data for 3 students. Create a CSS style sheet & use it to display the document.

program 5.xml

```
<?xml-stylesheet type="text/css" href="5.css"?>
<!DOCTYPE HTML>
<html>
  <head>
    <h1> Students Description </h1>
  </head>
  <Students>
    <student>
      <USN>USN : HSU17CS063 </USN>
      <Name>NAME : SANTHOSH </NAME>
      <college>COLLEGE : SOMIT </college>
      <branch>BRANCH : Computer Science & Engineering </branch>
      <year>YEAR : 2017 </year>
      <email>E-MAIL : santhosh@gmail.com </email>
    </student>
    <student>
      <USN>USN : HSU17CS0611 </USN>
      <Name>NAME : MANORANJAN </NAME>
      <college>COLLEGE : SOMIT </college>
      <branch>BRANCH : Computer Science & Engineering </branch>
      <year>YEAR : 2017 </year>
      <e-mail>E-MAIL : manoranjana@gmail.com </e-mail>
    </student>
  </Students>
</html>
```

```

<Student>
  <USN> USN : JS017CS064 </USN>
  <Name> NAME : Chetran </Name>
  <College> COLLEGE : SOMIT </College>
  <Branch> BRANCH : Computer Science & Engineering </Branch>
  <Year> YEAR : 2017 </Year>
  <E-mail> E-MAIL : chetran@gmail.com </E-mail>

```

```

</Student>

```

```

</Student>

```

```

</html>

```

program 5.cxx

```

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 : HSUI7CS063

NAME : SANTHOSH

COLLEGE : SDMIT

BRANCH : Computer Science & Engineering

YEAR : 2017

E-mail : santosh@gmail.com

USN : HSUI7CS064

NAME : MANORAJAN

COLLEGE : SDMIT

BRANCH : Computer Science & Engineering

YEAR : 2017

E-mail : mansirajan@gmail.com

USN : HSUI7CS065

NAME : CHETHAN

COLLEGE : SDMIT

BRANCH : Computer Science & Engineering

YEAR : 2017

E-mail : chethan@gmail.com

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

program 6. php

```
<?php
print "<h3> REFRESH PAGE </h3>";
$name = "counter.txt";
$file = fopen($name, "a");
$hits = fscanf($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

7. 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: 90px;
    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>
```

Output

10 : 44 : 10 AM