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4SU17CS010

EXP1 : Simple Calculator using Java Script.

Write a Javascript to design a calculator to perform the following operations. Sum, product, difference and quotient.

AIM: To write a JavaScript to design a simple calculator.

Algorithm/procedure.

1. Create a webpage with the same name program1.html
2. Create table for calculator using HTML code.
3. Create html form and input for each entry.

PROGRAM:

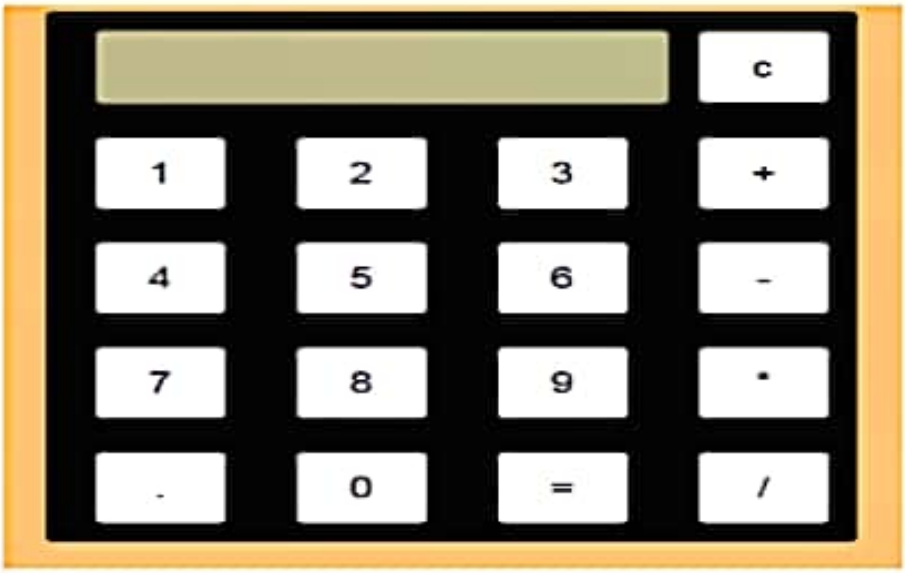
```
<!DOCTYPE>
HTML><html>
<head><style>
        table,td,th
        {
          border : 1px solid black;
          width : 33%
        text-align : center
        background-color : DarkGray;
        border-collapse : collapse;
      } table { margin : auto;}
        input { text-align : right; }
</style>
    <script type = "text/javascript">
        function calc(clicked_id)
{ var val1 = parseFloat(document.getElementById
                                ("value1").value);
  var val2 =
    parseFloat(document.getElementById("value2"),value);
if (isNaN(val1)|| isNaN(val2))
{ alert("Enter VALID NOUMBER");
      else if (clicked_id = "mul").
      document.getElementById("answer").value =
                                val1*val2;
```

```
else if (clicked_id == "div")
document.getElementById("answer").value = val1/val2;
else if (clicked_id == "add")
document.getElementById("answer").value = val1 + val2;
else if (clicked_id == "sub")
document.getElementById("answer").value = val1 - val2;
function cls()
{ value1.value = "0";
  value2.value = "0"
  answer.value = ""; }
</script></head>
<body>
</table>
<tr><th colspan="4">SIMPLE CALCULATOR</th></tr>
<tr><td>value1</td><td><input type="text" id="value1"
value="0" /></td><td>value2</td><td><input type="text" id="value2"
value="0" /></td></tr><tr><td><input type="button" value="Addition
id="add" onclick="calc(this.id)" /></td>
<td><input type="button" value="Substraction" id="sub"
onclick="calc(this.id)" /></td>
<td><input type="button" value="Multiplication" id="mul"
onclick="calc(this.id)" /></td>
<td><input type="button" value="Division" id="Div"
onclick="calc(this.id)" /></td></tr>
<tr><td>Answer:</td><td><input type="text" id="answer" value="" disabled /></td>
<td colspan="2"><input type="button" value="CLEAR ALL"
onclick="cls()" /></td></tr>
</table>
</body>
</html>
```

sample input and output

value1
Addition
Answer:

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=2.072980729807298	Addition =74.95 Subtraction =26.17 Multiplication=1233.1584 Division=2.072980729807298	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

EXP2 : Squares and Cubes of number from 1 to 10

Write a Javascript that calculates the squares and cubes of the number from 0 to 10 and output HTML text that displays the resulting values in an HTML table format.

HTML: To write.

program 2.html.

```
<!DOCTYPE HTML>
<html><head>
    <style>table, tr,
td {
    border: solid black;
    width: 33%
    text-align: center
    border-collapse: collapse
    background-color: lightblue; }
table { margin: auto; }
</style>
<script> document.write("table><tr><th colspan="3">
NUMBER FROM 0 TO 10 WITH THEIR SQUARES AND CUBES</th></tr>");
document.write<"tr><td>Number</td><td>Square</td>
<td>Cube</td></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

EXP3 : JavaScript : Text-Growing and Text-Shrinking

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.

program3.html

```
<!DOCTYPE HTML>
<Html>
<head><style> p {
                position: absolute;
                top: 50%;
                left: 50%;
                transform: translate(-50%,-50%); }
</style></head><body>
<p id="demo"></p>
<script>
    var var1 = setInterval(inTimer, 1000);
    var fs=5;
    var ids = document.getElementById("demo");
    function inTimer(){
ids.innerHTML= 'TEXT GROWING';
ids.setAttribute('style', "font-size:"+fs+"px; color:red");
fs+=5;
    if(fs>=50) { clearInterval(var1);
        var2 = setInterval(deTimer, 1000); }
} function deTimer(){
        fs-=5;
ids.innerHTML= 'TEXT SHRINKING';
ids.setAttribute('style', "font-size:"+fs+"px; color:blue");
if(fs==5) { clearInterval(var2); }
}
```

Output:

TEXT-GROWING

TEXT SHRINKING

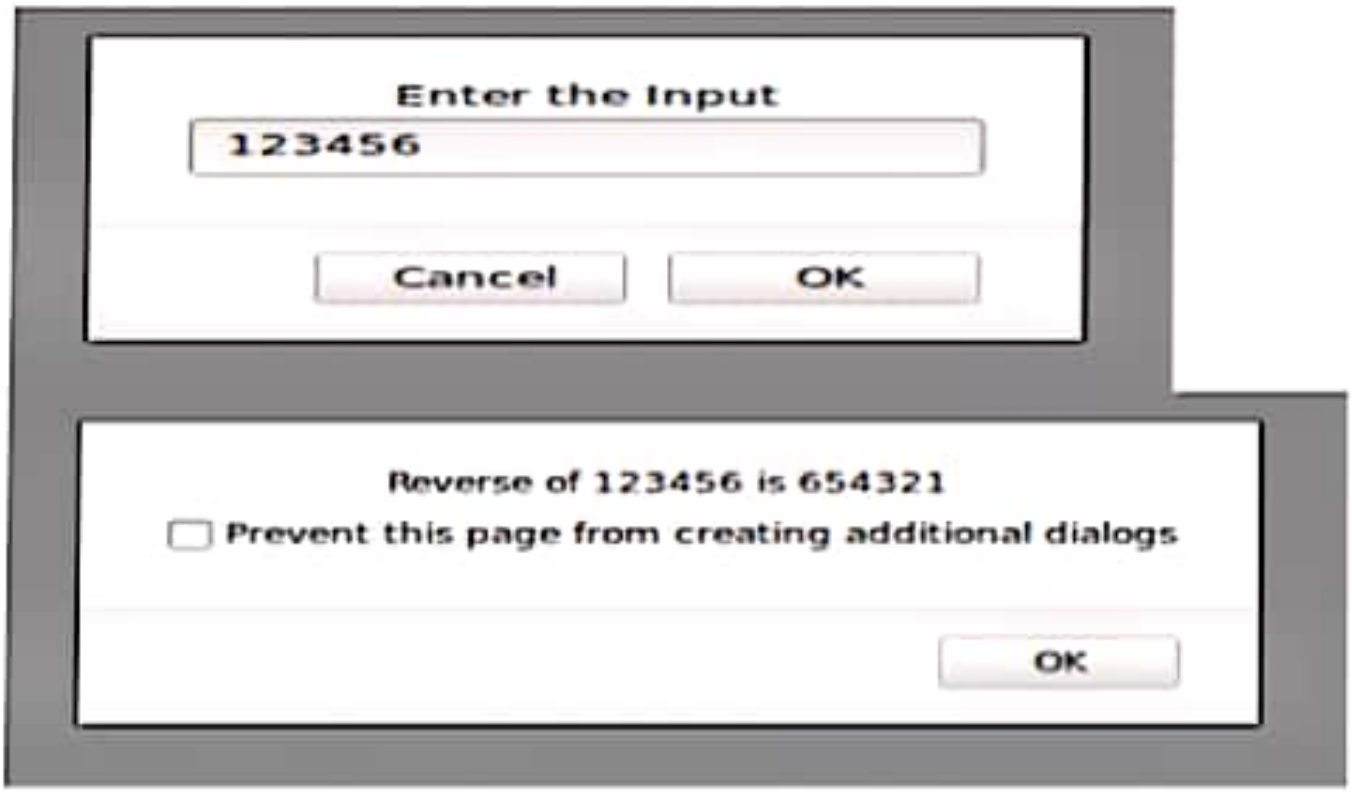
EXP4: HTML 5 and Javascript: position in the string of the left-most vowel and number its digits in reverse order.

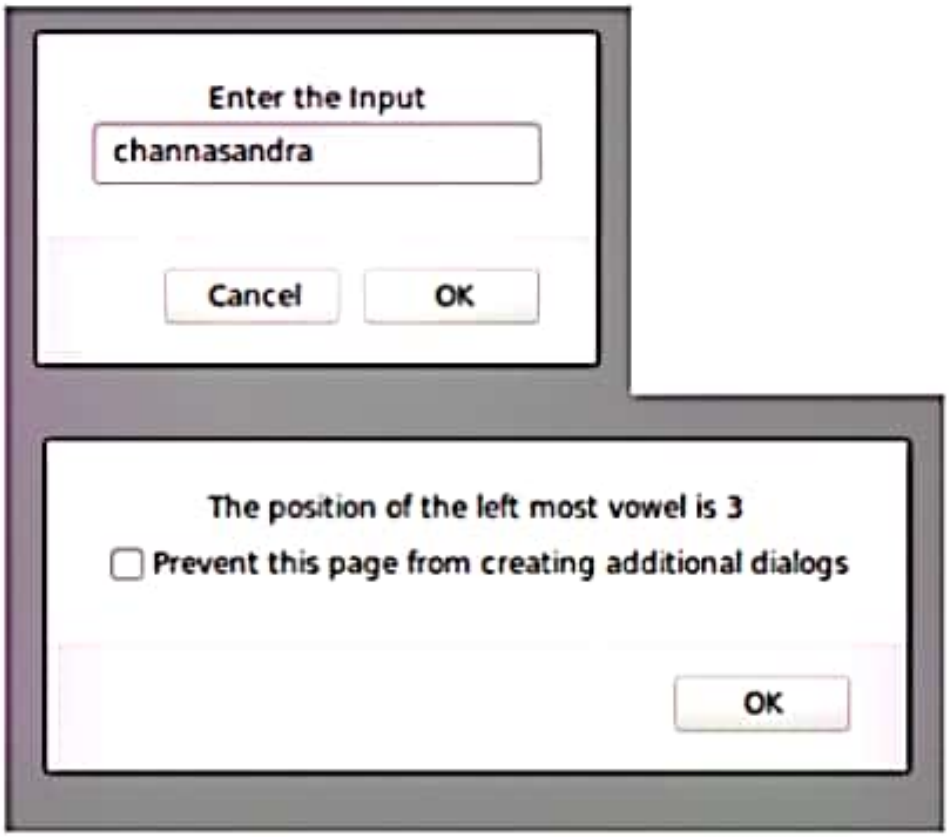
Develop and demonstrate a HTML 5 file that includes Javascript script that uses functions for the following problems:

program2.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(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 =='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
1.	CHANNASANDRA	The position of the left most vowel is 3	The position of the left most vowel is 3	PASS
2.	SKY	No vowel found in the entered string	No vowel found in the entered string	PASS
3.	MNKTO	The position of the left most vowel is 5	The position of the left most vowel is 5	PASS

EXP5 : XML document to store information about student

classmate Page

program 5 -xml-

```
<?xml-stylesheet type="text/css" href="5.css"?>
<!DOCTYPE HTML>
<html><head>
    <h1> STUDENT DESCRIPTION </h1>
</head><students>
    <Student>
<USN>USN : 1ME15CS001</USN>
<name>NAME : SANVI </name>
<college> COLLEGE: MSEC </college>
</branch> BRANCH : Computer Science and Engineering </branch>
<year> YEAR : 2015 </year>
<e-mail> E-mail : sanvi@gmail.com </e-mail>
</student>
<Student>
<USN> USN : 1ME15IS002</USN>
<name> NAME : MANORANJAN </name>
<college> COLLEGE: MSEC </college>
</branch> BRANCH : Information Science & Engineering </branch>
</year> YEAR : 2015 </year>
<email> E-Mail : manoranjan@gmail</e-mail>
</Student>
<student>
<USN> USN : 1ME13EC003</USN>
<name> NAME: CHANDANA </name>
<College> COLLEGE: MSEC</college>
<branch> BRANCH: Electronics and Communication Engineering
<year> YEAR: 2013</yea>
<email> E-MAIL: chanda@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 : 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 ;
} email {
display : block ; margin-left : 20px ; font : 12pt ; color : Blue ;
}
```

Output:

STUDENT DESCRIPTION

USN : 4SU17CS001
NAME : SANTHOSH
COLLEGE: SDMIT.
BRANCH : Computer Science and Engineering
YEAR : 2017
E-Mail: santosh@gmail.com

USN : 4SU17CS002
NAME : MANORAJAN
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

PHP. Display the number of visitors visiting the webpage.

program6.php.

```
<?php
    print "<h3>REFRESH PAGE</h3>";
    $name = "counter.text";
    $file = fopen($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

EXP 9: PHP program with variable states with value "Mississippi Alabama Texas Massachusetts Kansas"

Program 9.php.

```
<?php
    $states = "Mississippi Alabama Texas Massachusetts.
        Kanas"; $states Array = [];
    $States1 = explode (';' $states);
    echo "Original Array : <br>";
    foreach ($states1 as $i => $value)
    print ("STATES [$i] = $value <br>");
      foreach ($state1 as $state){
        if ()reg_match ('/xas$/', ($state)))
          $states Array [0] = ($states);
    }
      foreach ($states1 as $state){
        if preg_match ('/^k.*s$/i', ($state)))
          $states Array [1] = ($state);
    }
    foreach ($states1 as $state){
        if (preg_match ('/^M.*s$/', ($state)))
          $states Array [2] = ($states);
    }
    foreach ($state1 as $state){
        if preg_match ("/$/", $state)))
          $states Array [3] = ($state);
    } echo "<br><br> Resultant Array : <br>";
    foreach ($states Array 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
```

EXP 10: PHP program to sort the student records using selection sort.

program10.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="mebleb";
$a=[];
// create connection // open a new connection to the MySQL server
$conn=mysqli_connect($servername,$username,$password,$dbname);
// Check connection and return error description // the last connection memory any.
if ($conn->connect_error)
die("connection failed: ".$conn->connect_error);
$sql='SELECT * FROM student';
// perform a query against the database
```

```
$result = $conn->query($sql);
echo "<br>";
echo "<center>BEFORE SORTING
</center>"; echo "<table border='2'>";
echo"<br>";
echo
"<tr>USN</th><th>NAME</th><th>Address</th><th>Phone</th></tr>";
if($result->num_rows>0)
{ // output data of each row and fetches a result row as
associative array.
while($row = $result->fetch_assoc()){
echo "<br>";
echo "<td>".$row["usn"]."</td>";
echo"<td>".$row["name"]."</td>";
echo"<td>".$row["addr"]."</td>";
echo"<td>".$row["usn"]."</td>"; }
}
else echo "Table is Empty";
echo "</table>";
$n = count($a);
$b = $a;
for($i=0;$i<($n-1);$i++)
{
$pos = $i;
echo "<td>".$d[$i]."</td></tr>";
}
echo "</table>";
$conn->close();
?>
</body>
</html>
```

Output:

BEFORE SORTING

USN	NAME	Address
4SU17CS019	Niranjini	Bengaluru
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