1)

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

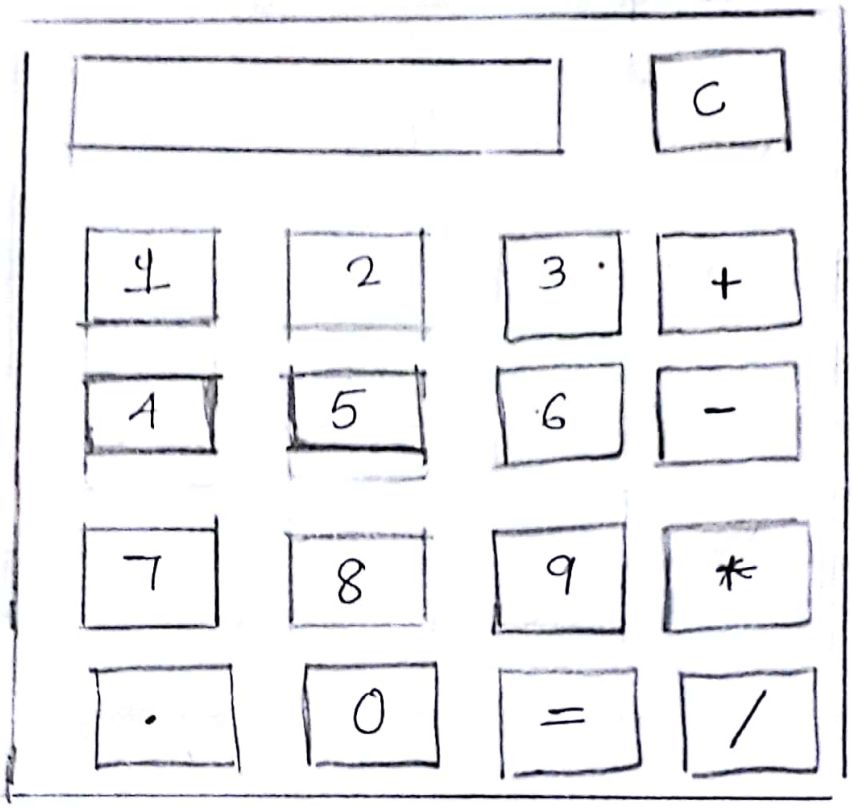
```
<!DOCTYPE>
<html>
 <head>
    <link rel="stylesheet" href="sty.css" />
 </head>
   <center>
   <body>
<form name = "calculator">
     <table border = "3" >
 <tr><td colspan = "4" > <input name = "display"
 id = "display" readonly </td> </tr>
 <tr>
 <td> input type = "button" value = '1' onclick =
   "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>
```

```
<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 = "/" 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 :-



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.

```
<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>
```

Output :-

NUMBERS FROM 0 TO 10 WITH THIER 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) 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

Program 3.html

```
<!DOCTYPE html>
<html>
<body>
<p id = "myP1"> TEXT-GROWING </p>
<p id = "myP2"> TEXTSHRINKING </p></body>
<Script>
// Global declaration
var size = 10;
vali = 0;
var myWait1 = setInterval(GrowText1, 100);
Function GrowText1()
{
if (size<51)
{
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";
}
clr
{
clearInterval(myVar1);
myVar1 = setInterval(ShrinkText, 100);
// Now hide the 1st paragraph and display the
  second paragraph
document.getElementById("myP1").style.
  visibility = "hidden";
document.getElementById("myP1").style.font
Size = '1pt';
document.getElementById("myP2").style.
visibility = "visible";
}
}
function ShrinkText()
{
  if (size > 5)
  {
  size = size - 1;
```

document.getElementById("myP2").style.fontSize = (size + 'pt');

Output:

TEXT-GROWING

TEXT SHRINKING

f) 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 with its digits in the reverse order.

program 4.html:

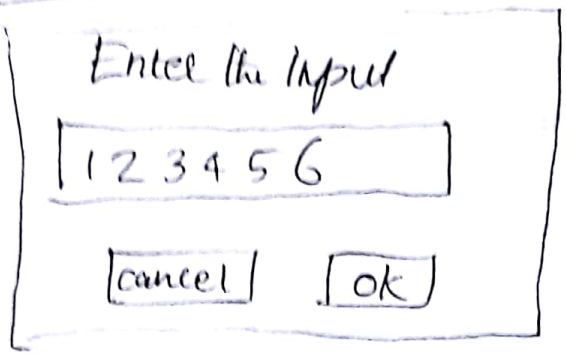
```
<!DOCTYPE HTML>
<html>
<body>
<Script type = "text/javascript">
Var Str = prompt ("Enter the Input", "");
```

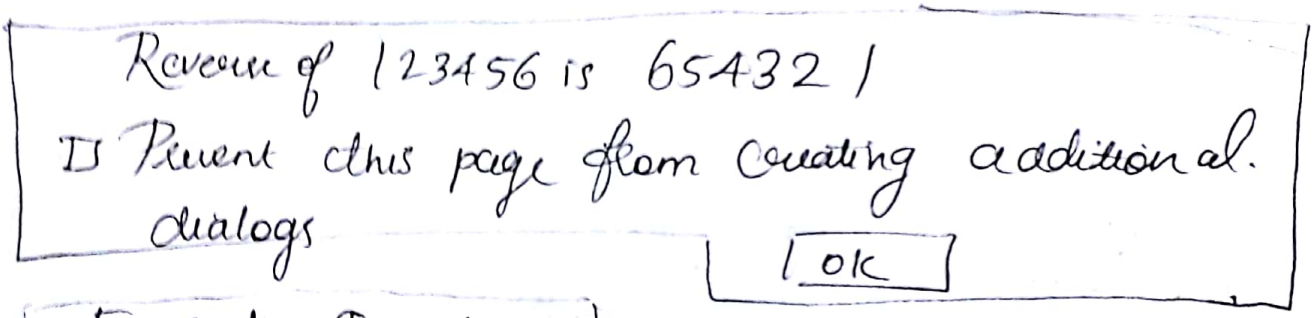
```
if (! (isNaN (str)) )
{
    var num, rev=0, remainder;
    num = parseInt (str);
    while (num!=0) {
        remainder = num%10;
        num = parseInt (num/10);
        rev = rev * 10 + remainder;
    }
    alert ("Reverse of "+ str + " is " + rev);
}
else
{
    str = str.toUpperCase ();
    for (var i=0; i< str.length; i++) {
        var chr = str.charAt (i);
    if (chr =='A' || chr == 'E' || chr ==
    'I' || chr == 'O' || chr == 'U') break;
    }
```

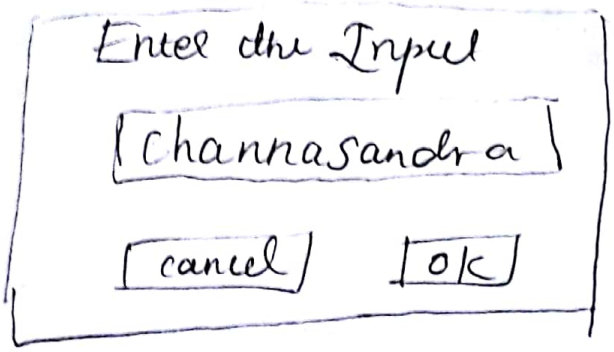
```
if (!(isNaN(str)))
{
  var num, rev = 0, remainder;
  num = parseInt(str);
  while (num != 0) {
    remainder = num % 10;
    num = parseInt(num/10);
    rev = rev * 10 + remainder;
  }
  alert("Reverse of" + str + "is" + rev);
}
else
{
  str = str.toUpperCase();
  for(var i=0; i< str.length; i++) {
    var chr = str.charAt(i);
if (chr == 'A' || chr == 'E' || chr == 'I' ||
  chr == 'O' || chr == 'U') break;
  }
if (i< str.length)
    alert("the position of the left most vowel
is " + (i+1));
  else
  alert("No vowel found in the entered
string");
  }
```

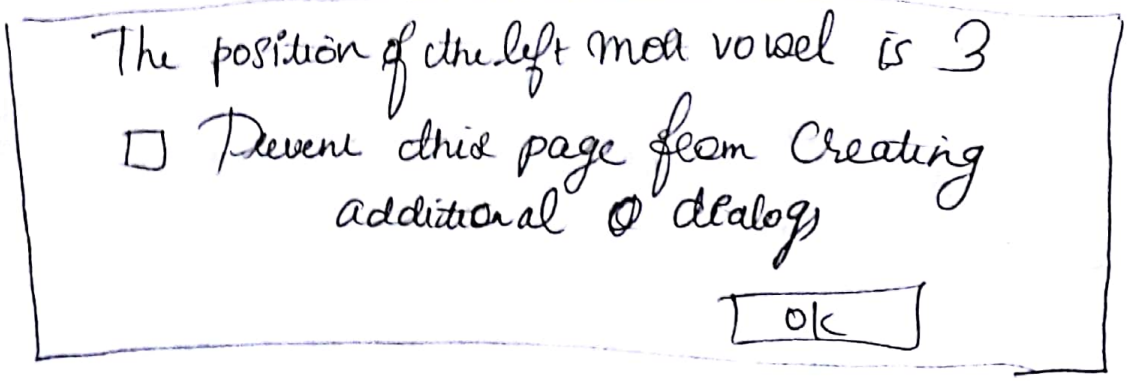
</script>
</body>
</html>

Output









Enter the Input

Channasandra

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
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.	Monkto	The position of the left most vowel is 5	The position of the left most vowel is 5	PASS

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 5. xml

```
<? xml-stylesheet type="text/css" href="5.css"?>
<! DOCTYPE HTML>
<html>
    <head>
        <h1> STUDENTS DESCRIPTION </h1>
    </head>
    <Students>
        <Student>
            <USN> USN : 4SU17CS001
            <name> NAME : SANTHOSH
            <college> COLLEGE : SDMIT
            <branch> BRANCH : Computer Science & Engineering
            <year> YEAR : 2017 </year> </branch>
            <e-mail> E-mail : Santhosh@gmail.
                com </e-mail>
        </Student>
        <Student>
            <USN> USN : 4SU17CS002 </USN>
            <name> NAME : MANORANJAN </name>
            <college> COLLEGE : SDMIT </college>
            <branch> BRANCH : Computer Science and
Engineering </branch>
            <year> YEAR : 2017 </year>
            <e-mail> E-mail : Manoranjan@gmail.
com </e-mail>
```

```
</Student>
<Student>
  <USN> USN : 4SU17CS003 </USN>
  <name> NAME : CHETHAN</name>
  <college> COLLEGE: SDMIT </college>
<branch> BRANCH : Computer Scienu and
  Engineering </branch>
  <yeae> YEAR : 2017 </yeae>
 <e-mail> E-mail : chethan@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-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;
  }
  email {
     display: block; margin-left: 20px;
  font-size: 12pt; color: Blue;
  }
```

Output:

STUDENT DESCRIPTION
USN: 4SU17CS001
NAME: SANTHOSH
COLLEGE: SDM17
BRANCH: Computer Science and Engineering
YEAR: 2017
E-mail: santhosh@gmail.com

USN: 4SU17CS002
NAME: MANORANJAN
COLLEGE: SDMIT
BRANCH: Computer Sciena 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

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

```
print "<h3> REFRESH PAGE </h3>";
$name = "Counter.txt";
$file = fopen($name, "r");
$hits = fscanf($file, "%d");
fclose($file);
```

print "Total number of views : ".$hits[0];
?>

Output:

REFRESH PAGE

Total number of views : 10

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

Program 7.php

<!

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%;
            tranefoem: translate(-50%,-50%)
        }
    body{ background-color: black;}
</style>
<p> <?php echo date("h:i:sA"); ?>
    </p>
</head>
```

Output :-

10 : 44 : 08 AM.

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

Goto MySql and then type

create database weblab;

use weblab;

create table student (rno varchar(10), name varchar(20), address varchar(20));

program10.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 "<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>". $row["addr"]. "</td>
 </tr>";
 array_push ($a, $row["usn"]);
   }
}
else
    echo "Table is Empty";
echo "</table>";
 $n = count ($a);
 $b = $a;
```

```
<?ph>
    $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 "<br>";
echo "<center> BEFORE SORTING </center>";
```

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