Q write a JavaScript to design a simple calculator to perform following operations: sum, product, diff, quotient.

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PROGRAM 1A:

(1)

```
<!DOCTYPE html>
<html>
<head><title class>Lab Program 1</title>
    <h5 class = "center"> Name: AKSHAYA-K-M </h5>
    <h5 class = "center"> USN : 4SU17CS005 </h5>
    <style>
        .title {
            border-radius : 15px ;
            margin-bottom : 15px;
            text-align : center ;
            width : 250px ;
            color : royal blue ;
            background-color : cornsilk;
            border : solid rosybrown 2px ;
            }
        input [type = "text" ] {
            border-radius: 5px;
            text-align : right ;
            background-color : white;
            width : 95% ;
            }
        input [type= "button" ]{
            border-radius: 10px;
            background-color : gray;
            border-color : black ;
            color : whitesmoke;
            width : auto ;
            }
```

```
.title1{
        background-color : lightgray;
        }
.center{
        margin-left : auto;
        margin-right : auto;
        }
</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 center">SDM --Javascript lab program
                                </div>
<!---creating a table--->
  <table class = "title1 center" border = "3" >
    <tr>
      <td>
        <input type = "button" value = "CE" onclick = "clr()">
    </td>
  <td colspan = "3">
      <input type = "text" id = "sdm">
</td></tr>  -2-
```

```
<!-- creating buttons and assign values to % -->
<tr>
    <td>
        <input type = "button" value = "+" onclick = disp('+')>
    </td>
    <td>
        <input type="button" value = "1" onclick = disp('1')>
    </td>
    <td>
    <input type = "button" value = "2" onclick = "disp('2')">
    </td>
    <td>
    <input type = "button" value = "3" onclick = disp('3')>
    </td>
</tr>
<tr>
    <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>
</tr>
```

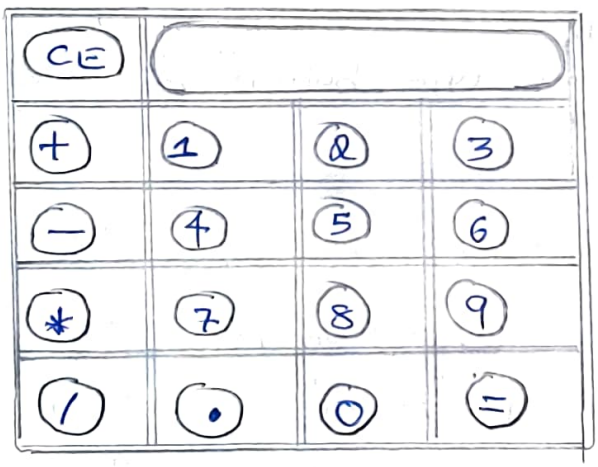
```
<td>
    input type="button" value="/" onclick="disp('/')">
</td>
<td>
  input type="button" value="." onclick="disp('.')">
</td>
<td>
  input type="button" value="0" onclick="disp('0')">
</td>
<td>
  input type="button" value="=" onclick="solve()">
</td>
</tr>
</table>
</body>
</html>
```

Output

Name: AKSHAYA-k-M

USN : 4SU17CS005

SDM - -Javascript lab program



PROGRAM 1B

Write a JavaScript to design that calculates the squares and cubes of the numbers from 0 to 10 and output Html text that display the resulting values in an HTML table format.

```
<!DOCTYPE html>
<html>
<head>
<script>
document.write('<h1 align="right"> Squares and Cubes
                of 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 their square 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

Javascript : T

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. Then the font size decreased to 5pt.

```
<!DOCTYPE html>
<html>
<body>
<p id = "myP1">TEXT-GROWING</p>
<p id = "myP2">TEXT SHRINKING</p> </body>
<Script>
Var size = 10;
var i = 0;
var myWait1 = setInterval(GrowText1, 100);
Function GrowText()
{
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='1pb';
document.getElementById("myP2").style.visibility="visible";
}
}
function ShrinkText()
{
 if(size>5)
 {
 size=size-1;
document.getElementById("myP2").style.fontsize=
                                    size+'pb');
 }
}
```

Output:

TEXT-GROWING

TEXT SHRINKING

PROGRAM-4

4) Develop and demonstrate a HTML-5 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.

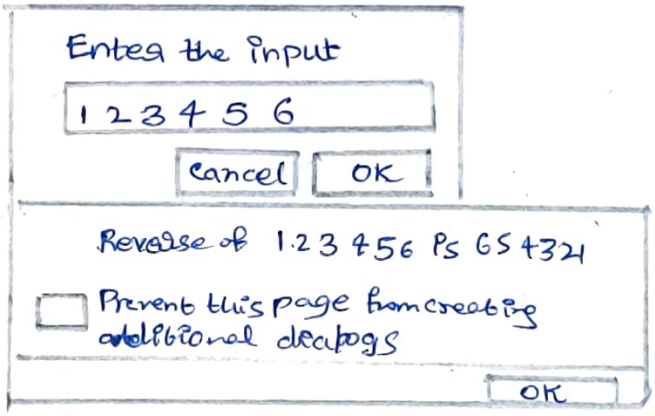
c) Parameter : A number

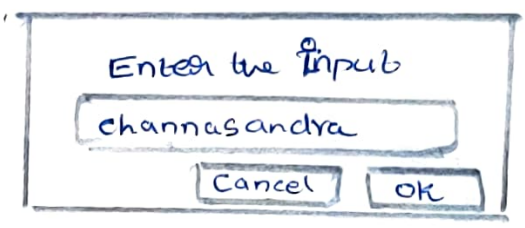
d) Output : The number with it's digits in the reverse order.

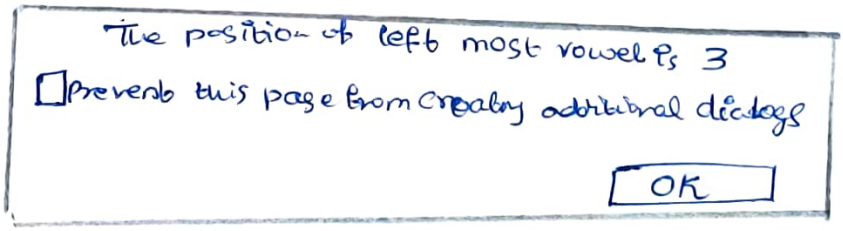
```
<!DOCTYPE HTML>
<html>
  <body>
    <script type = "text/javascript">
     var str = prompt("Enter the Input");
     if (!(isNaN(str)))
      {
       var num, rev = 0, remainder;
       num = parseInt(str);
       while (num != 0) {
          remainder = num%10;
          num = parseInt(num/10);
          rev = rev*10 + remainder;
        }
       alert("Reverse of " + str + " is " + rev);
    }
    else
      {
        str = str.toUpperCase();
```

```
for (var i=0; i<str.length; i++) {
    var 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:







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 left most vowel is 3	The position of left most vowel is 3	PASS
3.	SKY	No vowel found in the entered string	No vowel found in the entered string	PASS
4.	MANGALORE	The position of left most vowel is 5	The position of left most vowel is 5	PASS

5)

PROGRAM – 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.

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

Program5.css

```
student {
        display: block; margin-top : 10px; color : Navy;
        }
USN {
    display : block; margin-left : 10px ; font-size: 14pt;
    color : Red;
    }
```

```
name{
    display:bbck; maagin-left: 20px; font-size : 12pt;
    color : maroon;
    }
college{
    display : block ; maagin-left: 20px; font-size: 12pt;
    color: Blue;
    }
branch{
    display: block; maagin-left: 20px; font-size: 12pt;
    color: Green;
    }
year{
    display: block ; maagin-left: 20px ; font-size : 14pt ;
    color : Green;
    }
email{
    display : block ; maagin-left: 20px ; font-size : 14pt ;
    Color : Blue;
    }
```

Output:

STUDENT DESCRIPTION

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

USN : 4SU17CS002
NAME : MANORANJAN
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

PROGRAM-6

Write 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");
    $hits = fscan($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

Program7.php

```
<!DOCTYPE HTML>
<html>
 <head>
   <meta-http-equiv="refresh" content="1" />
   <style>
        P{
          color:white;
          font-size: 90 px;
          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>
</html>
```

Output:

10 : 44 : 08 AM

PROGRAM-10

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(usn 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
//Open 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";
$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 = $result -> fetch_assoc())
  {
    echo "<tr>";
    echo "<td>" . row["usn"] . "</td>";
    echo "<td>" . row["name"] . "</td>";
    echo "<td>" . row["addr"] . "</td>";
  } array_push ($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 ($result -> num_rows > 0)
  {
    while($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	Mysore
4SU17CS019	Niranjini	Bengaluru
4SU17CS042	Vandana	Belthangady