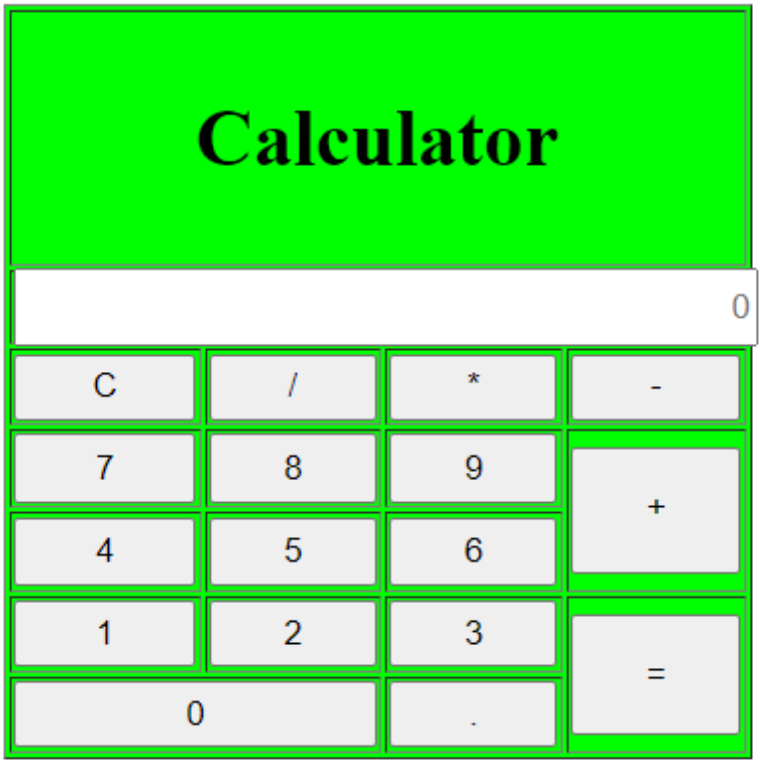
Program 7: Write a JavaScript to design a simple calculator to perform the following operations: sum, product, difference and quotient

Code:

```
<!DOCTYPE html>
<html>
<head>
<title>Calculator</title>
<style>
body
{
margin:150px;
}
input{
width:100%;
height:100%;
}
</style>
<script>
function display(x){
document.getElementById("text1").value+=x;
}
function compute(){
var x = document.getElementById("text1").value;
document.getElementById("text1").value = eval(x);
}
</script>
</head>

<body>
<center>
<form>
   <table border="1" bgcolor="lime" height="300px" width="300px">
   <tr>
<th colspan=4><h1>Calculator</h1></th>
</tr>
<tr >

<td colspan=4><input type="text" id="text1" placeholder="0" style="text-align:right;"/></td>

</tr>
<tr>
<td><input type="reset" value="C" /></td>
<td><input type="button" value="/" onClick="display(this.value)"/></td>
<td><input type="button" value="*" onClick="display(this.value)"/></td>
<td><input type="button" value="-" onClick="display(this.value)"></td>
</tr>
<tr>
<td><input type="button" value="7" onClick="display(this.value)"></td>
<td><input type="button" value="8" onClick="display(this.value)"></td>
<td><input type="button" value="9" onClick="display(this.value)"></td>
<td rowspan=2><input type="button" value="+" style="height:50px;"
```

```
onClick="display(this.value)"></td>
</tr>
<tr>
<td><input type="button" value="4" onClick="display(this.value)"></td>
<td><input type="button" value="5" onClick="display(this.value)"></td>

<td><input type="button" value="6" onClick="display(this.value)"></td>
</tr>
<tr>
<td><input type="button" value="1" onClick="display(this.value)"></td>
<td><input type="button" value="2" onClick="display(this.value)"></td>
<td><input type="button" value="3" onClick="display(this.value)"></td>
<td rowspan=2><input type="button" value="=" style="height:48px;"
onClick="compute()" ></td>
</tr>
<tr>
<td colspan=2><input type="button" value="0" onClick="display(this.value)"
style="width:100%"></td>
<td><input type="button" value="." onClick="display(this.value)"></td>
</tr>
</table>
</form>
</center>
</body>
</html>
```



Program 8: Write a Program to create a html page to display a new image & text when the mouse comes over the existing content in the page

Code:

```
<html>
  <head>
    <title>Mouse Event onmouseover and onmouseout</title>
    <script>
      function mouseHover(image)
      {
```

```
            image.src = "demo.jpeg";
          }
          function mouseOut(image)
          {
           document.getElementById("p2").innerHTML = "New Line";
            image.src= "dog.jpeg";
            document.getElementById("p1").innerHTML = "This is a text on mouse out Event";

          }
        </script>
    </head>
    <body>
        <p id="p2"></p>
        <img src="boy.jpeg" onmouseover="mouseHover(this)"  onmouseout="mouseOut(this)">
        <p id = "p1"></p>
    </body>
</html>
```

Program 9: Write a Javascript program to display the calendar using javascript code by getting the year from the user.

```
<html>
<head>
<script language="javascript">
function day_title(day_name)
{
document.write("<td align=center width=35
bgcolor=lightblue><b>"+day_name+"</b></td>");
}
function fill_table(month,month_len)
{
day=1;
document.write("<table border=1 cellspacing=3 cellpadding=3%>");
document.write("<td colspan=7 align=center bgcolor=red><b>"+month+"
"+year+"</b><tr>");
```

```
day_title("Sun");
day_title("Mon");
day_title("Tue");
day_title("Wed");
day_title("Thu");
day_title("Fri");
day_title("Sat");
document.write("</tr><tr>");
for(var i=1; i<start_day;i++)
{
document.write("<td>");
}
for(var i=start_day; i<8;i++)
{

document.write("<td align=center bgcolor=silver>"+day+"</td>");
day++;
}
document.write("<tr>");
while(day<=month_len)
{
for(var i=1; i<=7 && day<=month_len;i++)
{
document.write("<td align=center bgcolor=silver>"+day+"</td>");
day++;
}
document.write("<tr>");
start_day=i;
}
document.write("</tr></table><br>");
}
year=prompt("enter 4 digit year ",2016);
today=new Date("January 1, "+year);
start_day=today.getDay()+1;
fill_table("January", 31);
if (year%4==0)
fill_table("February", 29);
else
fill_table("February", 28);
fill_table("March", 31);
fill_table("April", 30);
fill_table("May", 31);
fill_table("June", 30);
```

```
fill_table("July", 31);
fill_table("August", 31);
fill_table("September", 30);
fill_table("October", 31);
fill_table("November", 30);
fill_table("December", 31);
</script>
</head>
</html>
```

Program 10: Write JavaScript to validate the following fields of the Registration page.

1. First Name (Name should contain alphabets and the length should not be less than 6 characters).

2. Password (Password should not be less than 6 characters length).

3. E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com)

4. Mobile Number (Phone number should contain 10 digits only).

5. Last Name and Address (should not be Empty).

```
<html>
<head><title>Program 8-Registration Form Validation</title></head>
<body bgcolor="#E4F0F8">
<script type='text/javascript'>
function formValidator()
{
// Make quick references to our fields
var firstname = document.getElementById('firstname');
var lastname = document.getElementById('lastname');
var email = document.getElementById('email');
var pass = document.getElementById('pass');
var addr = document.getElementById('addr');
var mobileno = document.getElementById('mobileno');
// Check each input in the order that it appears in the form!
if(notEmpty(firstname, "can not be null")){

if(isAlphabet(firstname, "Please enter only letters for your Firstname")){
if(lengthRestriction(firstname, 6)){
if(isAlphabet(lastname, "Please enter only letters for your Lastname")){
if(emailValidator(email, "Please enter a valid email address")){
if(lengthRestriction(pass, 6)){
if(isAlphanumeric(pass, "please enter Numbers and Letters Only for password")){
if(notEmpty(addr, "please enter the address")){
```

```
if(isNumeric(mobileno, "Please enter a valid mobileno")){
if(lengthRestriction1(mobileno, 10 , 10)){
return true;
} } } }
}
}
}
} } }
return false;
}
function notEmpty(elem, helperMsg){

if(elem.value.length == 0){
alert(helperMsg);
elem.focus(); // set the focus to this input
return false;
}
return true;
}
function isNumeric(elem, helperMsg){

var numericExpression = /^[0-9]+$/;
if(elem.value.match(numericExpression)){
return true;
}else{
alert(helperMsg);
elem.focus();
return false;
}
}
function isAlphabet(elem, helperMsg){
var alphaExp = /^[a-zA-Z]+$/;
if(elem.value.match(alphaExp)){
return true;
}else{
alert(helperMsg);
elem.focus();
return false;
}
}
function isAlphanumeric(elem, helperMsg){
var alphaExp = /^[0-9a-zA-Z]+$/;
if(elem.value.match(alphaExp)){
return true;
}else{
alert(helperMsg);
elem.focus();
return false;

}
}
function lengthRestriction(elem, min){
var uInput = elem.value;
if(uInput.length >= min){
```

```
return true;
}else{
alert("Please enter minimum " +min+ " characters");
elem.focus();
return false;
}
}
function emailValidator(elem, helperMsg)
{
var emailExp = /^[\w\-\.\+]+\@[a-zA-Z0-9\.\-]+\.[a-zA-z0-9]{2,4}$/;
if(elem.value.match(emailExp))
{
return true;
}
else{
alert(helperMsg);
elem.focus();
return false;
}
}
function lengthRestriction1(elem, min, max)
{

var uInput = elem.value;
if(uInput.length >= min && uInput.length <= max)
{
return true;
}
else {
alert("Please enter 10 numbers only");
elem.focus();
return false;
}
}
</script>
<font color="blue" size="6" face="arial">Registration Form</font><br /><br />
<form onsubmit='return formValidator()' action="right.html">
First Name(Minimum 6 characters)<font color="red">* </font>
<input type='text' id='firstname' /><br /><br />
Last Name<font color="red"><font color="red">* </font> </font>    
<input type='text' id='lastname' /><br /><br />
Email Address<font color="red">* </font>    
<input type='text' id='email' /><br />
<font color="red">(one e-mail id only):</font>    
<font color="redblue">e.g. anilkumaratb@gmail.com</font><br /><br/>
Password(minimum 6 characters)<font color="red">* </font>    
<input type='password' id='pass'><br /><br/>
Address<font color="red">* </font>    
<textarea rows="2" cols="20" id='addr' /></textarea> <br /> <br/>
Mobile No<font color="red">* </font>    

<input type='text' id='mobileno' /><br />
Gender: <input type='radio' name="gender">male
<input type='radio' name="gender">female<br/><br />
```

```
<input type='Submit' value='submit' />
<input type='Reset' value='reset' />
</form>
</body>
</html>
```