

JavaScript Assignment

Question 1

Interface

The image displays two states of a web form. The left state shows the initial form with labels 'Name:' and 'HomeTown:', input fields with placeholder text 'Insert name' and 'Insert HomeTown', and a green 'Submit' button. The right state shows the form after submission, with the input fields containing 'Oshada' and 'Piliyandala', and a black alert box displaying 'This page says Your name is: Oshada Your hometwon is: Piliyandala' with an 'OK' button.

CSS and HTML coding

```
<body>
  <div class="a">
    <form action="q1.html" method="post">
      <label>Name:</label><br><br>
      <input type="text" id="1" value="Insert name"><br><br>
      <label>HomeTown:</label><br><br>
      <input type="text" id="2" value="Insert HomeTown"><br><br>
      <input type="submit" value="Submit" onclick="myFunction()">
    </form>
  </div>
</body>
```

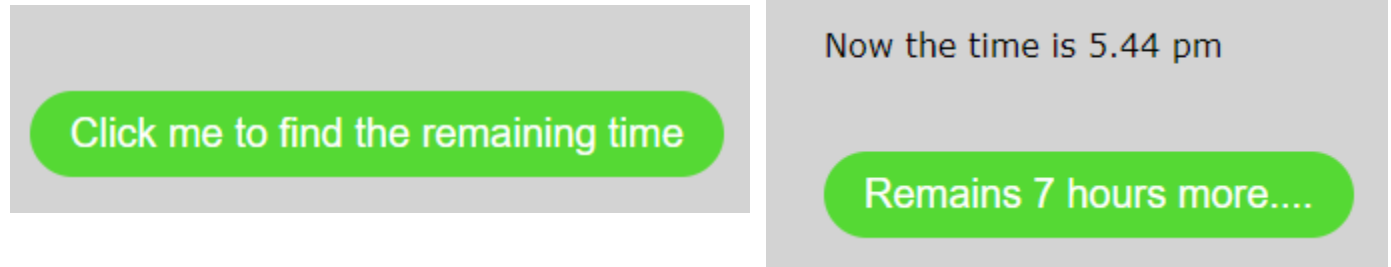
JavaScript coding

```
<script type="text/javascript">

  function myFunction(){
    let a = document.getElementById('1').value
    let b = document.getElementById('2').value
    alert("Your name is: "+a+"\nYour hometwon is: "+b);
  }
</script>
```

Question 2

Interface



CSS and HTML coding

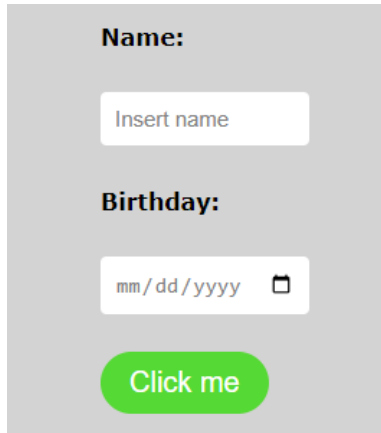
```
<body>
  <div id="a" class="container"></div>
  <div id="b" class="container">
    <button id="c" onclick="myFunction()">Click me to find the remaining time</button>
  </div>
</body>
```

JavaScript coding

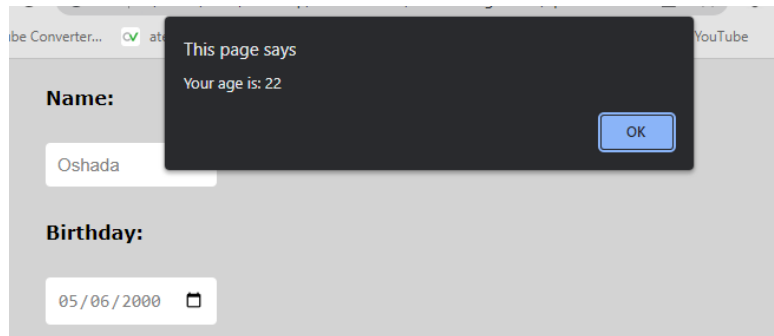
```
<script type="text/javascript">
  function myFunction(){
    var date = new Date();
    var hours = date.getHours();
    var minutes = date.getMinutes();
    var ampm = hours >= 12 ? 'pm' : 'am';
    hours = hours % 12;
    hours = hours ? hours : 12; // the hour '0' should be '12'
    minutes = minutes < 10 ? '0'+minutes : minutes;
    var a = document.getElementById("a");
    a.textContent = "Now the time is "+hours+"."+minutes+" "+ampm;
    a.innerHTML = "Now the time is "+hours+"."+minutes+" "+ampm;
    if(ampm == 'am'){
      c.textContent = "Remains "+(24-hours)+" hours more....";
      c.innerHTML = "Remains "+(24-hours)+" hours more....";
    }else{
      c.textContent = "Remains "+(12-hours)+" hours more....";
      c.innerHTML = "Remains "+(12-hours)+" hours more....";
    }
  }
</script>
```

Question 3

Interface



The form interface consists of a light gray background. At the top, the label "Name:" is in bold. Below it is a white text input field with the placeholder text "Insert name". Further down, the label "Birthday:" is in bold. Below it is a white date input field with the placeholder text "mm/dd/yyyy" and a calendar icon. At the bottom is a green rounded button with the text "Click me".



CSS and HTML coding

```
<body>
  <div class="a">
    <form action="q3.html" method="post">
      <label>Name:</label><br><br>
      <input type="text" id="1" value="Insert name"><br><br>
      <label>Birthday:</label><br><br>
      <input type="date" id="2" value="Insert birthday"><br><br>
      <button onclick="myFunction2()">Click me</button>
    </form>
  </div>
```

JavaScript coding

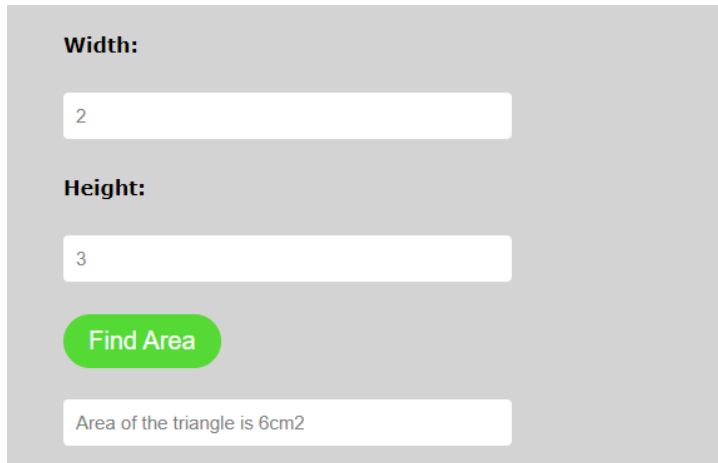
```
<script type="text/javascript">

function myFunction2(){
  var today = new Date();
  var birthDate = document.getElementById("2").value;
  var year = birthDate.substr(0, 4);
  var age = today.getFullYear() - year;

  alert("Your age is: "+age);
}
</script>
```

Question 4

Interface



Width:

Height:

Find Area

Area of the triangle is 6cm2

CSS and HTML coding

```
<body>
  <div class="a">
    <label>Width:</label><br><br>
    <input type="text" id="1" value=""><br><br>
    <label>Height:</label><br><br>
    <input type="text" id="2" value=""><br><br>
    <button id="e" onclick="myFunction2()">Find Area</button><br><br>
    <input type="text" id="c" onclick="myFunction2()">
  </div>
</body>
```

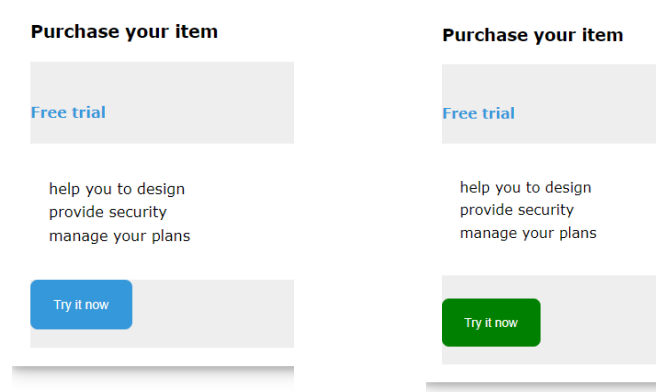
JavaScript coding

```
<script type="text/javascript">

function myFunction2(){
  var a = document.getElementById('1').value;
  var b = document.getElementById('2').value;
  var d = a*b;
  document.getElementById("c").value = "Area of the triangle is "+d+"cm2";
}
</script>
```

Question 5

Interface



CSS and HTML coding

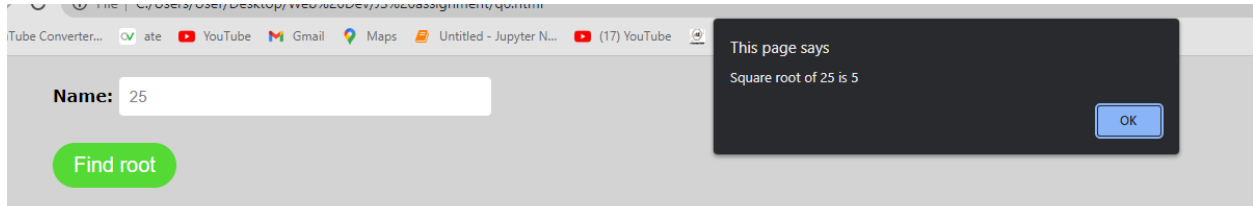
```
<body>
  <div class="a">
    <h3>Purchase your item</h3>
    <div class="b">
      <h4>Free trial</h4>
      <div class="c">
        <p>
          help you to design <br>
          provide security <br>
          manage your plans <br>
        </p>
      </div>
      <br>
      <button id="btn" onclick="myFunction()">Try it now</button>
    </div>
  </div>
</body>
```

JavaScript coding

```
<script type="text/javascript">
  function myFunction(){
    var property = document.getElementById('btn');
    property.style.backgroundColor = "green";
  }
</script>
```

Question 6

Interface



CSS and HTML coding

```
<body>
  <div class="a">
    <label>Name:</label>
    <input type="text" id="1" value="Insert name"><br><br>
    <button onclick="myFunction()">Find root</button>
  </div>
</body>
```

JavaScript coding

```
<script type="text/javascript">

function myFunction(){
  let a = document.getElementById('1').value
  var c = Math.sqrt(a);
  alert("Square root of "+a+" is "+c);
}
</script>
```

Question 7

Interface

Available Hotel Packages

- ☐ Wedding Package
- ☐ BirthdayPackage
- ☐ Normal Function Package
- ☐ Day out Package

Submit

Available Hotel Packages

- ☐ Wedding Package
- ☒ BirthdayPackage
- ☐ Normal Function Package
- ☐ Day out Package

Submit

CSS and HTML coding

```
<body>
<h2>Available Hotel Packages</h2>
<form class="" action="q7.html" method="post">
  <input type="checkbox" id="option1" name="option" onclick="checkChange(this)">
  <label> Wedding Package</label><br>
  <input type="checkbox" id="option2" name="option" onclick="checkChange(this)">
  <label> BirthdayPackage</label><br>
  <input type="checkbox" id="option3" name="option" onclick="checkChange(this)">
  <label> Normal Function Package</label><br>
  <input type="checkbox" id="option4" name="option" onclick="checkChange(this)">
  <label> Day out Package</label><br><br>
  <input type="submit" value="Submit">
</form>
</body>
```

JavaScript coding

```
<script>
function checkChange(val){
  var Name = document.getElementsByName(val.name);
  var checked = document.getElementById(val.id);

  if (checked.checked) {
    for(var i=0; i < Name.length; i++){

      if(!Name[i].checked){
        Name[i].disabled = true;
      }else{
        Name[i].disabled = false;
      }
    }
  }
  else {
    for(var i=0; i < Name.length; i++){
      Name[i].disabled = false;
    }
  }
}
</script>
```

Question 8

Interface

Insert the amount

20% of value: NaN

Total Insert value+NaN=NaN

Insert the amount

20% of value: 30

Total 150+30=180

CSS and HTML coding

```
<body>

<div class="a">
  Insert the amount<br>
  <input onmouseout = "myFunction()" id = "userval" type="text" value="Insert value"><br>
  <label>20% of value:</label>
  <input class="b" type="text" id="1"><br><br>
  <label>Total</label>
  <input class="b" type="text" id="2">
</div>

</body>
```

JavaScript coding

```
<script type="text/javascript">
  function myFunction(){
    var a = document.getElementById("userval").value;
    var c = a*0.2;
    var d = Number(a)+c;
    document.getElementById("1").value = " " + c;
    document.getElementById("2").value = a + "+" + c + "=" + d;
  }
</script>
```


Question 9

Interface

Subject :

Marks :

Results

Subject :

Marks :

Results

Congratulations you have passed Maths subject

CSS and HTML coding

```
<body>
  <div class="a">
    <table>
      <tr>
        <td style>Subject :</td>
        <td><input id="1" type="text" name="" value=""></td>
      </tr>
      <tr>
        <td>Marks : </td>
        <td><input id="2" type="text" name="" value=""></td>
      </tr>
    </table>

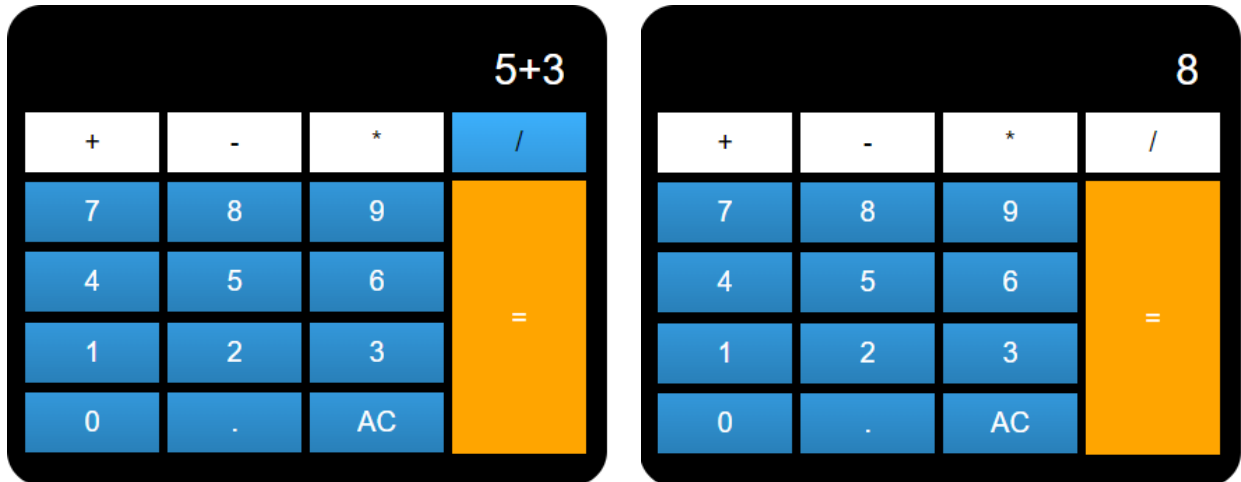
    <button onclick="myFunction()" type="button" name="button">Results</button><br><br>
    <input class="b" type="text" id="3">
  </div>
</body>
```

JavaScript coding

```
<script type="text/javascript">
  function myFunction(){
    let subject = document.getElementById('1').value;
    let marks = document.getElementById('2').value;
    if(Number(marks)>=35){
      document.getElementById('3').value = "Congratulations you have passed "+subject+" subject";
    }else{
      document.getElementById('3').value = "You have failed "+subject+" subject";
    }
  }
</script>
```

Question 10

Interface



CSS and HTML coding

```
<body>
<div class="a">
  <input id="user" type="text" name="" value=""><br>
  <table>
    <tr>
      <td><button onclick = "display('+')" id = "+" class="button button2" type="button" name="button">+</button></td>
      <td><button onclick = "display('-')" id = "-" class="button button2" type="button" name="button">-</button></td>
      <td><button onclick = "display('*')" id = "*" class="button button2" type="button" name="button">*</button></td>
      <td><button onclick = "display('/')" id = "/" class="button button2" type="button" name="button">/</button></td>
    </tr>
    <tr>
      <td><button onclick = "display('7')" id = "7" type="button" name="button">7</button></td>
      <td><button onclick = "display('8')" id = "8" type="button" name="button">8</button></td>
      <td><button onclick = "display('9')" id = "9" type="button" name="button">9</button></td>
      <td rowspan="4"><button onclick = "calculate()" id = "=" class = "button button3" type="button" name="button">=</button></td>
    </tr>
    <tr>
      <td><button onclick = "display('4')" id = "4" type="button" name="button">4</button></td>
      <td><button onclick = "display('5')" id = "5" type="button" name="button">5</button></td>
      <td><button onclick = "display('6')" id = "6" type="button" name="button">6</button></td>
    </tr>
    <tr>
      <td><button onclick = "display('1')" id = "1" type="button" name="button">1</button></td>
      <td><button onclick = "display('2')" id = "2" type="button" name="button">2</button></td>
      <td><button onclick = "display('3')" id = "3" type="button" name="button">3</button></td>
    </tr>
    <tr>
      <td><button onclick = "display(this.id)" id = "0" type="button" name="button">0</button></td>
      <td><button onclick = "display(this.id)" id = "." type="button" name="button">.</button></td>
      <td><button onclick = "clearScreen()" id = "AC" type="button" name="button">AC</button></td>
    </tr>
  </table>
</div>
</body>
```

JavaScript coding

```
<script type="text/javascript">
  function display(clicked_id){

    document.getElementById('user').value += clicked_id;
    return clicked_id;

  }
  function calculate(){

    let x = document.getElementById('user').value;
    let y = eval(x);
    document.getElementById('user').value = y;

    return y
  }
  function clearScreen(){

    document.getElementById('user').value = '';

  }

</script>
```

Github link of the code files

<https://github.com/SuhadaKOKA/JavaScript-Assignment>