CCA-104: Web Technologies Assignment

Q1. Write html and css for the following using div

Ans.Lists and Hyperlinks

```
1<!DOCTYPE html>
2<html lang="en">
3<!-- Save as "HtmlEg2.html" -->
4<head>
5  <meta charset="utf-8">
6  <title>Lists and Hyperlinks</title>
7</head>
8<body>
9  <h1>Lists and Hyperlinks</h1>
10  <p>There are two types of <em>lists</em> in HTML:</p>
11  <ol>
12    <li>Ordered List.</li>
13    <li>Unordered List.</li>
14  </ol>
15
16  <p>This is a nested unordered list of links:</p>
17  <ul>
18    <li>Online Validator:
19      <ul>
20        <li>W3C Online HTML Validator @ <a href="https://validator.w3.org/">https://valid
21        <li>W3C Online CSS Validator @ <a href="https://jigsaw.w3.org/css-validator/">ht
22      </ul>
23    </li>
24    <li>Specifications:
25      <ul>
26        <li>HTML5 @ <a href="http://www.w3.org/TR/html5/">http://www.w3.org/TR/html5/</a
27        <li>CSS3 Selectors @ <a href="http://www.w3.org/TR/css3-selectors/">http://www.w
28      </ul>
29    </li>
30  </ul>
31</body>
32</html>
```

How it Works?

1. The `<!-- ... -->` (in Line 3) is an HTML comment. Comments are ignored by the browsers, but are important to provide explanations to the readers as well as the author.
2. There are two types of lists in HTML: ordered list and unordered list. An ordered list is marked by `<ol>...</ol>` and displayed with numbers; while a unordered list is marked by `<ul>...</ul>` and displayed with bullets. Each of the list items is marked by `<li>...</li>`.
3. You can *nest* a list inside another list, by placing the complete inner list definition inside a list item `<li>...</li>` of the outer list.
4. Hyperlink is marked by `<a>` standalone tag. The attribute `href="`*`url`*`"` provides the destination URL of the link.

3.3 Example 3: Tables and Images

```
<!DOCTYPE html>
<html lang="en">
<!-- Save as "HtmlEg3.html" -->
<head>
  <meta charset="utf-8">
  <title>Table and Images</title>
  <style>
table {  /* table */
   border: 1px solid black;
   border-spacing: 5px;
   border-collapse: separate;
}
th, td {  /* cells */
   border: 1px solid #aaa;
   padding: 5px 10px;
}
</style>
</head>
<body>
  <h1>Table and Images</h1>
  <table>
    <caption>Logo of Languages</caption>
    <tr>
      <th>S/No</th>
      <th>Language</th>
      <th>Logo</th>
    </tr>
    <tr>
      <td>1.</td>
      <td>HTML5</td>
      <td><img src="../images/HTML5_Logo_128.png" alt="HTML Logo" height="64" width="64
    </tr>
    <tr>
      <td>2.</td>
      <td>CSS3</td>
      <td><img src="../images/css3.png" alt="CSS Logo"  height="64" width="64"></td>
    </tr>
    <tr>
      <td>3.</td>
      <td>JavaScript</td>
      <td><img src="../images/js3.png" alt="JavaScript Logo" height="64" width="64"></t
    </tr>
  </table>
</body>
</html>
```

How it Works?

1. A table, consisting of rows of cells, can be marked via `<table>...</table>`.
2. A HTML table is row-centric. You shall first mark a row via `<tr>...</tr>`, and then mark the cells of the row via `<th>...</th>` (for header cell) or `<td>...</td>` (for details cell).
3. The `<caption>...</caption>` element can be nested under `<table>` to provide a caption for the table.
4. Image is marked via the `<img>` tag. The mandatory attribute `src` specifies the path (or url) for the image source file; `alt` gives the alternative text if the image cannot be displayed. I used relative path in the `src`, where "`..`" denotes the parent directory. You need to find some images, store them and figure out your own relative path.
5. The `<img>`'s optional attributes `width` and `height` specify the width and height of the image displayed area. They are used here to resize the images for consistent display.
6. In the `HEAD` section, I added some so-called *style rules* under the `<style>...</style>` tags, so as to nicely display the table. You could ignore the styles now, which will be covered later in the CSS section.

3.4 HTML Template

HTML Document Template

```
 1<!DOCTYPE html>
 2<html lang="en">
 3<head>
 4  <meta charset="utf-8">
 5  <title>YOUR TITLE HERE!</title>
 6  <link href="filename.css" rel="stylesheet">
 7  <script src="filename.js"></script>
 8</head>
 9<body>
10  <!-- YOUR CODE HERE! -->
11</body>
12</html>
```

External CSS and JavaScript are often used in an HTML document. Line 6 includes an external CSS file; and line 7 includes an external JavaScript file.

3.5 HTML Document Validator

You can submit your HTML document to the W3C Online Validator (@ http://validator.w3.org/) for validation.

3.6 Debugging HTML

Firebug or Web Developer Tools

The Firebug plug-in for Firefox (@ getfirebug.com) is simply a great tool for web development. It supports HTML, CSS, JavaScript, DOM and more. Install and get it started to inspect the web pages of your favorite site.

To debug HTML under Firebug:

1. Launch Firebug ⇒ Choose the "HTML" panel to view your HTML codes.
2. To inspect an element, click on the "Inspect" button and select the HTML element of interest from the browser window. You can check/modify the "Style", "Layout", "DOM" and "Events" (on the right panel) associated with the selected element.

Q 2. Write html for the following tab

Ans

```
!DOCTYPE html>
<html>

   <head>
      <title>HTML Tables</title>
   </head>

   <body>
      <table border = "1">
         <tr>
            <td>Row 1, Column 1</td>
            <td>Row 1, Column 2</td>
         </tr>

         <tr>
            <td>Row 2, Column 1</td>
            <td>Row 2, Column 2</td>
         </tr>
      </table>

   </body>
</html>
```

This will produce the following result −

Here, the **border** is an attribute of <table> tag and it is used to put a border across all the cells. If you do not need a border, then you can use border = "0".

Table Heading

Table heading can be defined using **<th>** tag. This tag will be put to replace <td> tag, which is used to represent actual data cell. Normally you will put your top row as table heading as shown below, otherwise you can use <th> element in any row. Headings, which are defined in <th> tag are centered and bold by default.

Example

Live Demo

```
<!DOCTYPE html>
<html>

   <head>
      <title>HTML Table Header</title>
   </head>

   <body>
```

```
      <table border = "1">
         <tr>
            <th>Name</th>
            <th>Salary</th>
         </tr>
         <tr>
            <td>Ramesh Raman</td>
            <td>5000</td>
         </tr>

         <tr>
            <td>Shabbir Hussein</td>
            <td>7000</td>
         </tr>
      </table>
   </body>

</html>
```

This will produce the following result −

Cellpadding and Cellspacing Attributes

There are two attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The cellspacing attribute defines space between table cells, while cellpadding represents the distance between cell borders and the content within a cell.

Example

Live Demo

```
<!DOCTYPE html>
<html>

   <head>
      <title>HTML Table Cellpadding</title>
   </head>

   <body>
      <table border = "1" cellpadding = "5" cellspacing = "5">
         <tr>
            <th>Name</th>
            <th>Salary</th>
         </tr>
         <tr>
            <td>Ramesh Raman</td>
            <td>5000</td>
         </tr>
         <tr>
            <td>Shabbir Hussein</td>
            <td>7000</td>
```

```
         </tr>
      </table>
   </body>

</html>
```

This will produce the following result −

Colspan and Rowspan Attributes

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Example

Live Demo

```
<!DOCTYPE html>
<html>

   <head>
      <title>HTML Table Colspan/Rowspan</title>
   </head>

   <body>
      <table border = "1">
         <tr>
            <th>Column 1</th>
            <th>Column 2</th>
            <th>Column 3</th>
         </tr>
         <tr>
            <td rowspan = "2">Row 1 Cell 1</td>
            <td>Row 1 Cell 2</td>
            <td>Row 1 Cell 3</td>
         </tr>
         <tr>
            <td>Row 2 Cell 2</td>
            <td>Row 2 Cell 3</td>
         </tr>
         <tr>
            <td colspan = "3">Row 3 Cell 1</td>
         </tr>
      </table>
   </body>

</html>
```

This will produce the following result −

Tables Backgrounds

You can set table background using one of the following two ways −

- **bgcolor** attribute − You can set background color for whole table or just for one cell.
- **background** attribute − You can set background image for whole table or just for one cell.

You can also set border color also using **bordercolor** attribute.

Note − The *bgcolor*, *background*, and *bordercolor* attributes deprecated in HTML5. Do not use these attributes.

Example

Live Demo

```
<!DOCTYPE html>
<html>

   <head>
      <title>HTML Table Background</title>
   </head>

   <body>
      <table border = "1" bordercolor = "green" bgcolor =
"yellow">
         <tr>
            <th>Column 1</th>
            <th>Column 2</th>
            <th>Column 3</th>
         </tr>
         <tr>
            <td rowspan = "2">Row 1 Cell 1</td>
            <td>Row 1 Cell 2</td>
            <td>Row 1 Cell 3</td>
         </tr>
         <tr>
            <td>Row 2 Cell 2</td>
            <td>Row 2 Cell 3</td>
         </tr>
         <tr>
            <td colspan = "3">Row 3 Cell 1</td>
         </tr>
      </table>
   </body>

</html>
```

This will produce the following result −

Q3. Write a Program to display count, from 5 to 15 using PHP loop as given below.

Write a program to count 5 to 15 using PHP loop

Description:
Write a Program to display count, from 5 to 15 using PHP loop as given below.

Rules & Hint

- You can use “for” or “while” loop
- You can use variable to initialize count
- You can use html tag for line break

View Solution/Program

```php
<?php

$count = 5;

while($count <= 15)

{

  echo $count;

  echo "<br>" ;


  $count++;

}

?>
```

PHP

Copy

```
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5
6
7
8
9
10
11
12
13
```

14
15

Write a factorial program using for loop in php

Description:

Write a program to calculate factorial of a number using for loop in php.

```php
<?php
$num = 3;
$factorial = 1;

for ($x=$num; $x>=1; $x--)
{
    $factorial = $factorial * $x;
}

echo "The factorial of $num is $factorial";
?>
```

PHP

Copy

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The factorial of 3 is 6

Write a program to create Chess board in PHP using for loop

Description:

Write a PHP program using nested for loop that creates a chess board.

Conditions:

- You can use html table having width=”400px” and take “30px” as cell height and width for check boxes.

View Solution/Program

```
<table width="400px" cellspacing="0px" cellpadding="0px" border="1px">
<?php
for($row=1;$row<=8;$row++)
{
        echo "<tr>";
        for($column=1;$column<=8;$column++)
        {
                $total=$row+$column;
                if($total%2==0)
                {
                        echo "<td height=35px width=30px
bgcolor=#FFFFFF></td>";
                }
                else
                {
                        echo "<td height=35px width=30px
bgcolor=#000000></td>";
                }
        }
        echo "</tr>";
}
?>
</table>
```

Q4. Write a program in javascript for Unit Conversion from Kilometer (km) to Centimeter (cm). use ofmessage box is necessary .

Ans

Create an input element that can convert a value from one Length measurement to another.

Step 1) Add HTML:

Example - Feet to Meter

```
<p>
  <label>Feet</label>
  <input id="inputFeet" type="number" placeholder="Feet"
  oninput="lengthConverter(this.value)" onchange="lengthConverter(this.
value)">
</p>
<p>cm: <span id="outputMeters"></span></p>
```

Step 2) Add JavaScript:

Example - Feet to Meter

```
/* When the input field receives input, convert the value from feet to
meters */
function lengthConverter(valNum) {
  document.getElementById("outputMeters").innerHTML = valNum
/ 0.0022046;
}
```

Try it Yourself »

Convert from Feet to other Measurements

The table below shows how to convert from Feet to other Length measurements:

Description	Formula
Convert from Feet to Meters	m=ft/3.2808

Convert from Feet to Inches	in=ft*12
Convert from Feet to cm	cm=ft/0.032808
Convert from Feet to Yards	yd=ft*0.33333
Convert from Feet to Kilometers	km=ft/3280.8
Convert from Feet to Miles	mi=ft*0.00018939

Convert from Meters to other Measurements

The table below shows how to convert from Meters to other Length measurements:

Description	**Formula**
Convert from Meters to Feet	ft=m*3.2808
Convert from Meters to Inches	in=m*39.370
Convert from Meters to cm	cm=m/0.01

Convert from Meters to Yards	yd=m*1.0936
Convert from Meters to Kilometers	km=m/1000
Convert from Meters to Miles	mi=m*0.00062137

Convert from Inches to other Measurements

The table below shows how to convert from Inches to other Length measurements:

Description	**Formula**
Convert from Inches to Feet	ft=in*0.083333
Convert from Inches to Meters	m=in/39.370
Convert from Inches to cm	cm=in/0.39370
Convert from Inches to Yards	yd=in*0.027778
Convert from Inches to Kilometers	km=in/39370

Convert from Inches to Miles	mi=in*0.000015783

Convert from cm to other Measurements

The table below shows how to convert from cm to other Length measurements:

Description	**Formula**
Convert from cm to Feet	ft=cm*0.032808
Convert from cm to Meters	m=cm/100
Convert from cm to Inches	in=cm*0.39370
Convert from cm to Yards	yd=cm*0.010936
Convert from cm to Kilometers	km=cm/100000
Convert from cm to Miles	mi=cm*0.0000062137

Convert from Yards to other Measurements

The table below shows how to convert from Yards to other Length measurements:

Description	Formula
Convert from Yards to Feet	ft=yd*3
Convert from Yards to Meters	m=yd/1.0936
Convert from Yards to Inches	in=yd*36
Convert from Yards to cm	cm=yd/0.010936
Convert from Yards to Kilometers	km=yd/1093.6
Convert from Yards to Miles	mi=yd*0.00056818

Convert from Kilometers to other Measurements

The table below shows how to convert from Kilometers to other Length measurements:

Description	Formula

Convert from Kilometers to Feet	ft=km*3280.8
Convert from Kilometers to Meters	m=km*1000
Convert from Kilometers to Inches	in=km*39370
Convert from Kilometers to cm	cm=km*100000
Convert from Kilometers to Yards	mi=km*1093.6
Convert from Kilometers to Miles	mi=km*0.62137

Convert from Miles to other Measurements

The table below shows how to convert from Miles to other Length measurements:

Description	**Formula**
Convert from Miles to Feet	ft=mi*5280
Convert from Miles to Meters	m=mi/0.00062137

Convert from Miles to Inches	in=mi*63360
Convert from Miles to cm	cm=mi/0.0000062137
Convert from Miles to Yards	yd=mi*1760
Convert from Miles to Kilometers	km=mi/0.62137