WEB TECHNOLOGY ASSIGNMENT

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BCS-3D(GROUP-A)

1. Create a Table with Heading and Caption: Create a table that contains a heading row with three columns: "Product", "Price", and "Quantity". Include a caption at the top of the table stating "Product List". Ensure that the table has a cellpadding of 10px and cellspacing of 5px.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initialscale=1.0">
<title>Product List</title>
</head>
<body>
   <table border="1" cellpadding="10" cellspacing="5">
      <caption><strong>Product List</strong></caption>
      <tr>
         <th>Product</th>
         <th>Price</th>
         <th>Quality</th>
      </tr>
      <tr>
         <td>IPhone</td>
         <td>$500</td>
         <td>High</td>
      </tr>
      <tr>
         <td>Samsung</td>
         <td>$1000</td>
         <td>Premium</td>
      </tr>
      <tr>
         <td>Redmi</td>
         <td>$100</td>
```

```
        <td>Good</td>
      </tr>
  </table>
</body>
</html>
```

OUTPUT:

Product List

Product	Price	Quality
IPhone	$500	High
Samsung	$1000	Premium
Redmi	$100	Good

2. Design Table with Colspan and Rowspan

Design a table with 4 rows and 6 columns. Merge the first two columns in the second row using colspan and merge the first two rows of the third column using rowspan. The table should contain the following data: Row 1: "Name", "Age", "Gender", "Country" Row 2: "John Doe", 28, Male, USA.

Row 3: "Jane Smith", 30, Female, Canada

Row 4: "Mike Johnson", 40, Male, UK

Set the table width to 80% of the page width and apply a background color of light gray to the header.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Table with Colspan and Rowspan</title>
  <style>       table {          width:
80%;          bordercollapse:
collapse;
      }       th,
td {
          border: 1px solid black;
padding:
10px;          text-align: center;
      }       th
{
          background-color: lightgray;
      }
  </style>
```

```
</head>
<body>
   <table>
      <tr>
         <th>Name</th>
         <th>Age</th>
         <th colspan="2">Gender</th>
         <th colspan="2">Country</th>
      </tr>
      <tr>
         <td colspan="2">John Doe</td>
         <td rowspan="2">Male</td>
         <td>28</td>
         <td>USA</td>
         <td>-</td>
      </tr>
      <tr>
         <td>Jane Smith</td>
         <td>30</td>
         <td>Female</td>
         <td>Canada</td>
      </tr>
      <tr>
         <td>Mike Johnson</td>
         <td>40</td>
         <td>Male</td>
         <td>-</td>
         <td>UK</td>
         <td>-</td>
      </tr>
   </table>
</body>
</html>
```

OUTPUT:

Name	Age	Gender		Country	
John Doe		Male	28	USA	-
Jane Smith	30		Female	Canada	
Mike Johnson	40	Male	-	UK	-

3. Create a Table with Specific Height and Width: Create a table with 5 rows and 3 columns. Set the height of the first column to 100px, the second column to 150px, and the third column to 200px. Ensure the table takes up 100% of the page width. Add alternating row colors for visual clarity.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Table with Specific Height and Width</title>
   <style>
      * {      margin: 0;
     padding: 0;
     boxsizing: border-
     box;
     }
     body {
         font-family: Arial, sans-serif;
      }        table {            width:
100%;            border-collapse:
collapse;
      }        th, td {
border: 1px solid #000;            text-align:
center;
padding: 10px;
      }
col:nth-child(1) {
width: 100px;
      }        col:nth-child(2)
{            width: 150px;
      }        col:nth-child(3)
{            width: 200px;
      }         tr:nth-
child(even) {
background-color: #f2f2f2;
      }         tr:nth-
child(odd) {
background-color: #ffffff;
      }
   </style>
</head>
<body>
   <table>
      <colgroup>
         <col>
         <col>
```

```
        <col>
      </colgroup>
      <thead>
        <tr>
          <th>Column 1</th>
          <th>Column 2</th>
          <th>Column 3</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Row 1, Col 1</td>
          <td>Row 1, Col 2</td>
          <td>Row 1, Col 3</td>
        </tr>
        <tr>
          <td>Row 2, Col 1</td>
          <td>Row 2, Col 2</td>
          <td>Row 2, Col 3</td>
        </tr>
        <tr>
          <td>Row 3, Col 1</td>
          <td>Row 3, Col 2</td>
          <td>Row 3, Col 3</td>
        </tr>
        <tr>
          <td>Row 4, Col 1</td>
          <td>Row 4, Col 2</td>
          <td>Row 4, Col 3</td>
        </tr>
        <tr>
          <td>Row 5, Col 1</td>
          <td>Row 5, Col 2</td>
          <td>Row 5, Col 3</td>
        </tr>
      </tbody>
    </table>
  </body>
</html>
```

OUTPUT:

Column 1	Column 2	Column 3
Row 1, Col 1	Row 1, Col 2	Row 1, Col 3
Row 2, Col 1	Row 2, Col 2	Row 2, Col 3
Row 3, Col 1	Row 3, Col 2	Row 3, Col 3
Row 4, Col 1	Row 4, Col 2	Row 4, Col 3
Row 5, Col 1	Row 5, Col 2	Row 5, Col 3

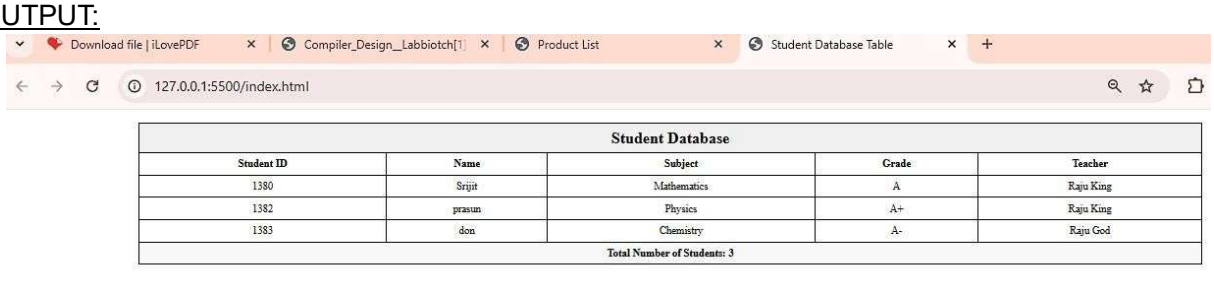
4. Design a Table with Multiple Headers and Footers: Design a table for a student database with the following columns: "Student ID", "Name", "Subject", "Grade", "Teacher". Add multiple header rows: one for the main title and another for the column names. Also, include a footer that calculates the total number of students.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Student Database Table</title>
   <style>
      table {        width: 80%;
   bordercollapse: collapse;
          margin: 20px auto;
      }        th, td {
border: 1px solid black;
text-align: center;            padding:
8px;
      }        th.main-title {            font-size:
1.5em;            background-color: #f0f0f0;
      }        tfoot {            background-color:
#f9f9f9;            font-weight: bold;
      }
   </style>
</head>
<body>
<table>
   <thead>
      <tr>
         <th colspan="5" class="main-title">Student Database</th>
      </tr>
      <tr>
         <th>Student ID</th>
         <th>Name</th>
         <th>Subject</th>
         <th>Grade</th>
         <th>Teacher</th>
      </tr>
```

```
    </thead>
    <tbody>
      <tr>
        <td>1380</td>
        <td>Srijit</td>
        <td>Mathematics</td>
        <td>A</td>
        <td>Raju King</td>
      </tr>
      <tr>
        <td>1382</td>
        <td>prasun</td>
        <td>Physics</td>
        <td>A+</td>
        <td> Raju King </td>
      </tr>
      <tr>
        <td>1383</td>
        <td>don</td>
        <td>Chemistry</td>
<td>A-</td>
        <td> Raju God</td>
      </tr>
    </tbody>
    <tfoot>
      <tr>
        <td colspan="5">Total Number of Students: 3</td>
      </tr>
    </tfoot>
</table>  </body>
</html>
```

OUTPUT:



Student Database				
Student ID	Name	Subject	Grade	Teacher
1380	Srijit	Mathematics	A	Raju King
1382	prasun	Physics	A+	Raju King
1383	don	Chemistry	A-	Raju God
Total Number of Students: 3				

5. Nesting Tables with Captions: Create a table containing three rows and four columns. In one of the cells, nest another table with 2 rows and 2 columns. The nested table should have a caption that reads "Nested Table". Ensure the nested table's background color is different from the outer table.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Nesting Tables with Captions</title>
   <style>        table {            border-
collapse: collapse;            width: 100%;
       }
table, th, td {
           border: 1px solid black;
       }
       .outer-table td {
height: 50px; textalign:
center;
          background-color: #f0f8ff;
      }
      .nested-table {     background-color:
      #ffcccb;
          width: 100%;
       }
   </style>
</head>
<body>
<h2>Outer Table with Nested Table</h2>
<table class="outer-table">
   <tr>
      <td>Cell 1</td>
      <td>Cell 2</td>
      <td>Cell 3</td>
      <td>Cell 4</td>
   </tr>
   <tr>
      <td>Cell 5</td>
      <td colspan="2">
         <table class="nested-table">
            <caption>Nested Table</caption>
            <tr>
               <td>Nested Cell 1</td>
               <td>Nested Cell 2</td>
```

```
            </tr>
            <tr>
               <td>Nested Cell 3</td>
               <td>Nested Cell 4</td>
            </tr>
         </table>
      </td>
      <td>Cell 6</td>
   </tr>
   <tr>
      <td>Cell 7</td>
      <td>Cell 8</td>
      <td>Cell 9</td>
      <td>Cell 10</td>
   </tr>
</table>
</body>
</html>
```

OUTPUT:

Outer Table with Nested Table

Cell 1	Cell 2	Cell 3	Cell 4
Cell 5	Nested Table		Cell 6
	Nested Cell 1	Nested Cell 2	
	Nested Cell 3	Nested Cell 4	
Cell 7	Cell 8	Cell 9	Cell 10

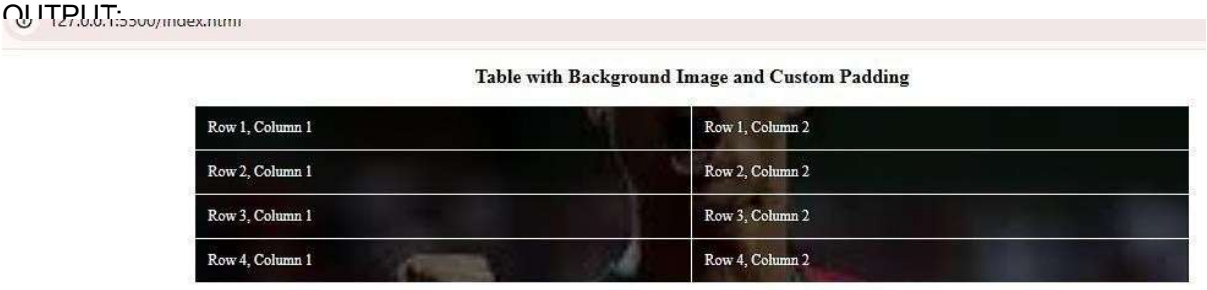
6. Table with Background image and Custom Cell Padding: Create a table with 4 rows and 2 columns, where each cell has a custom cellpadding of 15px. Apply a background image to the entire table (using the background attribute) and ensure the text inside the cells is readable. Include some dummy text for the cells.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Table with Background Image</title>
   <style>        table {            width:
60%;           bordercollapse:
```

```
collapse;            background-
image:
url('https://th.bing.com/th/id/OIP.DpcLyyRCeTWoiiMNdCTXxQHaEK?rs=1&pi
d=ImgDetMain');            background-size: cover;            backgroundposition:
center;            color: white;            font-size: 18px;            margin: 20px
auto;
      }       td {            padding:
15px;            border: 1px solid #fff;            background-color:
rgba(0, 0, 0,
0.6);
      }
  </style>
</head>
<body>
  <h2 style="text-align: center;">Table with Background Image and Custom
Padding</h2>
  <table>
    <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>
    <tr>
      <td>Row 3, Column 1</td>
      <td>Row 3, Column 2</td>
    </tr>
    <tr>
      <td>Row 4, Column 1</td>
      <td>Row 4, Column 2</td>
    </tr>
  </table>
</body>
</html>
```

OUTPUT:



7. Table with Multiple Column Span (Colspan): Create a table for an event schedule. The first row should have 4 columns: "Event", "Date", "Time", "Location". In the second row, merge the "Date" and "Time" columns using colspan. Ensure that the background color of the header row is light blue and the font is bold.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Event Schedule Table</title>
   <style>         table {
width: 50%;
bordercollapse: collapse;
margin: 20px auto;
       }        th
{
           background-color: lightblue;
font-weight:
bold;             border: 1px solid
#000;              padding:
10px;
       }        td {
border: 1px solid #000;
padding: 10px; textalign:
center;
      }
   </style>
</head>
<body>
   <table>
      <tr>
         <th>Event</th>
         <th>Date</th>
         <th>Time</th>
         <th>Location</th>
      </tr>
      <tr>
         <td>Workshop on AI</td>
         <td colspan="2">March 30, 2025, 10:00 AM - 12:00 PM</td>
         <td>Main Auditorium</td>
      </tr>
```

```
        <tr>
            <td>Technical Talk</td>
            <td colspan="2">March 31, 2025, 2:00 PM - 4:00 PM</td>
            <td>Conference Room</td>
        </tr>
    </table>
</body>
</html>
```

OUTPUT:

Event	Date	Time	Location
Workshop on AI	March 30, 2025, 10:00 AM - 12:00 PM		Main Auditorium
Technical Talk	March 31, 2025, 2:00 PM - 4:00 PM		Conference Room

8. (optional) Table with Footer and Dynamic Content: Create a table with 6 rows and 4 columns to display the sales data of a store. Include a footer row where the total sales are calculated by summing the values in the "Sales" column. The footer should be aligned to the center and have a background color of dark gray.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Sales Data Table</title>
    <style>         table
{
width: 80%;
bordercollapse:
collapse;
margin: 20px
auto;
       } th, td {     border:
       1px solid #ccc;
            padding: 10px;             text-align:
center;
       }         th {              background-
color: lightblue;
       }         tfoot {
background-color:
darkgray;              color:
white;             text-align:
center;
       }
```

```
        .total-sales {            font-weight:
bold;
        }
    </style>
</head>
<body>
    <h2 style="text-align: center;">Store Sales Data</h2>
    <table id="salesTable">
        <thead>
            <tr>
                <th>Product</th>
                <th>Quantity Sold</th>
                <th>Unit Price ($)</th>
                <th>Sales ($)</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>Product A</td>
                <td>10</td>
                <td>20</td>
                <td>200</td>
            </tr>
            <tr>
                <td>Product B</td>
                <td>5</td>
                <td>50</td>
                <td>250</td>
            </tr>
            <tr>
                <td>Product C</td>
             <td>8</td>
            <td>15</td>
              <td>120</td>
           </tr>
            <tr>
                <td>Product D</td>
                <td>3</td>
                <td>100</td>
                <td>300</td>
```

```
        </tr>
        <tr>
          <td>Product E</td>
          <td>7</td>
          <td>30</td>
          <td>210</td>
        </tr>
        <tr>
          <td>Product F</td>
          <td>6</td>
          <td>25</td>
          <td>150</td>
        </tr>
      </tbody>
      <tfoot>
        <tr>
          <td colspan="3">Total Sales</td>
          <td id="totalSales" class="total-sales"></td>
        </tr>
      </tfoot>
  </table>    <script>
function calculateTotalSales()
{          let table =
document.getElementById('salesTable');          let
totalSales = 0;          for (let i = 1; i < table.rows.length
- 1; i++) {          totalSales += parseFloat(table.rows[i].cells[3].innerHTML);
        }
        document.getElementById('totalSales').innerText =
totalSales.toFixed(2);
      }
      calculateTotalSales();
  </script>
</body>
</html>
```

OUTPUT:

Store Sales Data

Product	Quantity Sold	Unit Price ($)	Sales ($)
Coffe	10	20	200
Tea	5	50	250
Juice	8	15	120
Americano	3	100	300
Wine	700	3000	2100000
Prawn curry	6	25	150
Total Sales			2101020.00

9. Responsive Table with Nested and Multi-Row Spans: Design a table that displays employee information. The first row should be for headings, while the second row should

contain merged cells for "Name" and "Job Title" using rowspan. Nest a small table inside one of the cells with employee contact details. Set a maximum table width of 600px, and ensure it is responsive (adjusting based on the screen size).

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Responsive Table</title>
   <style>         table {
width: 100%;             maxwidth:
600px;             border-collapse:
collapse;             margin: 20px
auto;             border: 1px solid
#ddd;
       }         th,
td {
           border: 1px solid #ddd;
padding:
10px;             text-align: center;
       }         th
{
           background-color: #f4f4f4;
       }
       .nested-table {
width: 100%;             border:
none;
       }
       .nested-table td {
border: none;             padding:
5px;
       }
       @media (max-width: 600px)
{          table, th, td {
            font-size: 14px;
          }
      }
   </style>
</head>
<body>
   <table>
      <tr>
```

```
            <th>Name</th>
            <th>Job Title</th>
            <th>Contact Information</th>
            <th>Department</th>
        </tr>
        <tr>
            <td rowspan="2">John Doe</td>
            <td rowspan="2">Software Engineer</td>
            <td>
                <table class="nested-table">
                    <tr>
                        <td>Email:</td>
                        <td>john.doe@example.com</td>
                    </tr>
                    <tr>
                        <td>Phone:</td>
                        <td>+123-456-7890</td>
                    </tr>
                </table>
            </td>
            <td>IT</td>
        </tr>
        <tr>
            <td colspan="2">Additional Notes: Experienced in backend
development</td>
        </tr>
    </table>
</body>
</html>
```

OUTPUT:

Name	Job Title	Contact Information	Department
kevin Debruyne	Software Engineer	Email: kevin.Debruyne@example.com Phone: +123-456-7890	IT
		Additional Notes: Experienced in backend development	

10. Table with Custom Background Color and Borders: Create a table with 5 rows and 3 columns. Set the table's background color to #f0f0f0, and apply a custom border to each cell with a 2px solid blue line. The first row should have a dark gray background and white text, while the second row should have a light green background. Apply a height of 50px to each row.

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Custom Table</title>
<style>        table {            width:
100%;            border-
collapse:          collapse;            background-color:
#f0f0f0;
       }        table, td {            border:
2px solid blue;
       }        th, td {
text-align:  center;
height: 50px;
       }        th
{
           background-color: #333;
color: white;
       }        tr:nth-child(2) {            background-color:
#d5f5d5;
       }
   </style>
</head>
<body>
   <table>
       <tr>
           <th>Column 1</th>
           <th>Column 2</th>
           <th>Column 3</th>
       </tr>
       <tr>
           <td>Row 2, Cell 1</td>
           <td>Row 2, Cell 2</td>
           <td>Row 2, Cell 3</td>
       </tr>
       <tr>
           <td>Row 3, Cell 1</td>
           <td>Row 3, Cell 2</td>
       <td>Row 3, Cell 3</td>
      </tr>
      <tr>
```

```
        <td>Row 4, Cell 1</td>
        <td>Row 4, Cell 2</td>
<td>Row 4, Cell 3</td>
      </tr>
      <tr>
        <td>Row 5, Cell 1</td>
        <td>Row 5, Cell 2</td>
        <td>Row 5, Cell 3</td>
      </tr>
  </table>
</body>
</html>
```

OUTPUT:

Column 1	Column 2	Column 3
Row 2, Cell 1	Row 2, Cell 2	Row 2, Cell 3
Row 3, Cell 1	Row 3, Cell 2	Row 3, Cell 3
Row 4, Cell 1	Row 4, Cell 2	Row 4, Cell 3
Row 5, Cell 1	Row 5, Cell 2	Row 5, Cell 3

11. table with Dynamic Row and Column Sizes: Create a table with 3 rows and 3 columns. The first column should have a fixed width of 100px, the second column should have a width of 50%, and the third column should take up the remaining space. Ensure that the first row is merged using colspan across the second and third columns. Apply specific background colors to each row (row 1: blue, row 2: yellow, row 3: pink).

SOURCE CODE: <!DOCTYPE html>

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Dynamic Table</title>
  <style>       table {          width:
100%;          border-collapse:
collapse;
      }       th,
td {
        border: 1px solid black;
padding:
10px;          text-align: center;
      }
      .fixed-width {          width:
100px;
      }
      .half-width {          width:
50%;
```

```
        }
        .remaining-width {            width:
auto;
        }
        .row1                  {
background-color: blue;
color: white;
        }
        .row2 {
background-color: yellow;
        }
        .row3 {
background-color: pink;
        }
    </style>
</head>
<body>
    <table>
        <tr class="row1">
            <td colspan="2">Merged Cell (Row 1)</td>
        </tr>
        <tr class="row2">
            <td class="fixed-width">Row 2, Col 1</td>
            <td class="half-width">Row 2, Col 2</td>
            <td class="remaining-width">Row 2, Col 3</td>
        </tr>
        <tr class="row3">
            <td class="fixed-width">Row 3, Col 1</td>
            <td class="half-width">Row 3, Col 2</td>
            <td class="remaining-width">Row 3, Col 3</td>
        </tr>
    </table>
</body>
</html>
```

OUTPUT: