



" HTML Tables /Box
Shadow /text-shadow
and CSS Styling "

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Basic Table Structure

<table>: tag is used to create a table.

<tr> (Table Row) creates a row.

<td> (Table Data) defines a data cell.

<th> (Table Header) creates a header cell, which is bold and centered by default.

Output

Header 1	Header 2
Data 1	Data 2

Input

```
<!doctype html>
<html>
<head>
<title>page title</title>
</head>
<body>
<table>
  <tr>
    <th>Header 1</th>
    <th>Header 2</th>
  </tr>
  <tr>
    <td>Data 1</td>
    <td>Data 2</td>
  </tr>
</table>
</body>
</html>
```

Important Attributes

1. **align**: Horizontal alignment (left, center, right).
2. **valign**: Vertical alignment (top, middle, bottom).
3. **height**: Sets table/cell height in pixels or percentage.
4. **width**: Sets table/cell width in pixels or percentage.

Why % for width?: Makes the table responsive to screen size.

5. **border**: Defines table border thickness in pixels.

Range: Starts from 1, larger values mean thicker borders.

For example:

`border="1"`: Thin border (1 pixel).

`border="5"`: Thicker border (5 pixels).

6. **bordercolor**: Sets the color of the table's border.

Output

Left Align	Center Align	Right Align
Top Align	Middle Align	Bottom Align

Input

```
<!doctype html>
<html>
<head>
<title>page title</title>
</head>
<body>
<table border="1" bordercolor="blue" height="200" width="100%">
  <tr>
    <th align="left">Left Align</th>
    <th align="center">Center Align</th>
    <th align="right">Right Align</th>
  </tr>
  <tr>
    <td valign="top">Top Align</td>
    <td valign="middle">Middle Align</td>
    <td valign="bottom">Bottom Align</td>
  </tr>
</table>

</body>
</html>
```

Cellpadding / Cellspacing / Caption Tag

Cellpadding

Space between cell content and its border.

Cellspacing

Space between adjacent table cells.

Caption Tag

Title or description for a table.

Output

Header 1	Header 2
Data 1	Data 2

Input

```
<!doctype html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<table border="1" cellpadding="10" cellspacing="5">
  <caption>Table Caption</caption>
  <tr>
    <th>Header 1</th>
    <th>Header 2</th>
  </tr>
  <tr>
    <td>Data 1</td>
    <td>Data 2</td>
  </tr>
</table>
</body>
</html>
```

rowspan and colspan Attributes

- **rowspan** merges cells vertically.
- **colspan** merges cells horizontally.

OUTPUT

Merged Header	
Merged Row	Data 2
	Data 3

INPUT

```
<!doctype html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<table border="1">
  <tr>
    <th colspan="2">Merged Header</th>
  </tr>
  <tr>
    <td rowspan="2">Merged Row</td>
    <td>Data 2</td>
  </tr>
  <tr>
    <td>Data 3</td>
  </tr>
</table>

</body>
</html>
```

Border-collapse / Line-height / Border / Table Border Radius

1. **Border-collapse**

Specifies whether table borders are collapsed into a single border or separated. values are below

A. collapse: Merges adjacent cell borders into a single border.

B. separate: Keeps cell borders distinct, allowing spacing between them.

2. **Line-height**

Sets the amount of space above and below inline elements, affecting text spacing.

3. **Border**

Defines the thickness, style, and color of the table border (e.g., 2px solid blue).

4. Table Border Radius

Rounds the corners of the table using the border-radius property.

OUTPUT

Table Caption

Header 1	Header 2
Data 1	Data 2

Input

```
<!doctype html>
<html>
<head>
  <title>Table Example</title>
  <style>
    table {
      border-collapse: separate; /* Allows for rounded corners */
      border: 2px solid blue; /* 2px solid blue border */
      border-radius: 10px; /* Rounded corners */
      width: 100%; /* Full width */
      line-height: 1.5; /* Sets line height for better readability */
    }
    th, td {
      padding: 10px; /* Space inside cells */
      border: 1px solid black; /* Border for table cells */
    }
    caption {
      font-weight: bold; /* Makes caption text bold */
      margin: 10px; /* Adds space around caption */
    }
  </style>
</head>
<body>
  <table cellpadding="10" cellspacing="5">
    <caption>Table Caption</caption>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
    </tr>
    <tr>
      <td>Data 1</td>
      <td>Data 2</td>
    </tr>
  </table>
</body>
</html>
```

Nth-child / hover / nth-of-type

1. **tr:nth-child(odd)**: Selects and applies styles to odd-numbered rows in a table.
2. **tr:nth-child(even)**: Selects and applies styles to even-numbered rows in a table.
3. **td:nth-child(odd)**: Selects and applies styles to odd-numbered cells (columns) in a row.
4. **td:nth-child(even)**: Selects and applies styles to even-numbered cells (columns) in a row.
5. **tr:hover**: Changes the style of a row when the mouse hovers over it.
6. **td:hover**: Changes the style of a specific cell when the mouse hovers over it.

7. **table:nth-of-type(1):** Targets the first table on the page and applies specific styles to it.
8. **table:nth-of-type(2):** Targets the second table on the page and applies specific styles to it.

Output

Table with nth-child on Rows (tr)

Header 1	Header 2	Header 3
Data 1	Data 2	Data 3
Data 4	Data 5	Data 6
Data 7	Data 8	Data 9

Table with nth-child on Columns (td)

Header 1	Header 2	Header 3
Data 1	Data 2	Data 3
Data 4	Data 5	Data 6
Data 7	Data 8	Data 9

Input

With external css

Create a css file with an extension of **style.css**

```
table {  
    width: 100%;  
    border-collapse: collapse;  
    margin-bottom: 30px; /* Add space between tables */  
}  
th, td {  
    padding: 10px;  
    border: 1px solid black;  
}  
  
/* Styling for tr:nth-child */  
/* Odd and even rows */  
table:nth-of-type(1) tr:nth-child(odd) {  
    background-color: #f2f2f2; /* Light gray for odd rows */  
}  
table:nth-of-type(1) tr:nth-child(even) {  
    background-color: #ffffff; /* White for even rows */  
}  
  
/* Hover effect on rows */  
table:nth-of-type(1) tr:hover {  
    background-color: #ffeccb; /* Light red for row hover */  
}  
  
/* Styling for td:nth-child */  
/* Odd and even columns */  
table:nth-of-type(2) td:nth-child(odd) {  
    background-color: #d9edf7; /* Light blue for odd columns */  
}  
table:nth-of-type(2) td:nth-child(even) {  
    background-color: #fcf8e3; /* Light yellow for even columns */  
}  
  
/* Hover effect on cells */  
table:nth-of-type(2) td:hover {  
    background-color: #90ee90; /* Light green for cell hover */  
}
```

Now link this style.css with html with the help of link tag

```
<!doctype html>
<html>
<head>
  <title>nth-child Example Without Classes</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <!-- Table showing nth-child for rows (tr) -->
  <h3>Table with nth-child on Rows (tr)</h3>
  <table>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
      <th>Header 3</th>
    </tr>
    <tr>
      <td>Data 1</td>
      <td>Data 2</td>
      <td>Data 3</td>
    </tr>
    <tr>
      <td>Data 4</td>
      <td>Data 5</td>
      <td>Data 6</td>
    </tr>
    <tr>
      <td>Data 7</td>
      <td>Data 8</td>
      <td>Data 9</td>
    </tr>
  </table>

  <!-- Table showing nth-child for columns (td) -->
  <h3>Table with nth-child on Columns (td)</h3>
  <table>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
      <th>Header 3</th>
    </tr>
    <tr>
      <td>Data 1</td>
      <td>Data 2</td>
      <td>Data 3</td>
    </tr>
    <tr>
      <td>Data 4</td>
      <td>Data 5</td>
      <td>Data 6</td>
    </tr>
    <tr>
      <td>Data 7</td>
      <td>Data 8</td>
      <td>Data 9</td>
    </tr>
  </table>
</body>
</html>
```

`<colgroup>` / `<col>` / `span` Attribute

`<colgroup>`:

- This HTML element is used to group one or more columns in a table. It allows you to apply styles (like width and background color) to an entire group of columns at once.

`<col>`:

- The `<col>` element defines the properties (such as width) for individual columns within a `<colgroup>`. You can have multiple `<col>` elements inside a `<colgroup>` to style different columns differently.

span Attribute:

- The span attribute is used within a <col> element to specify how many columns that <col> applies to. For example, span="2" means the styling will affect two consecutive columns.

Output

Table with 5 Columns and Span

Name	Age	Country	Occupation	Hobby
John	25	USA	Engineer	Reading
Alice	30	UK	Designer	Painting
Mike	22	Canada	Student	Gaming
Sarah	28	Australia	Teacher	Traveling
David	35	Germany	Chef	Cooking

Input

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Table with 5 Columns and Span</title>
  <style>
    table {
      width: 70%;
      border-collapse: collapse; /* Collapse borders */
      margin: 20px auto; /* Center the table */
    }

    th, td {
      border: 1px solid black; /* Add border to cells */
      padding: 10px; /* Add padding inside cells */
      text-align: center; /* Center text */
    }

    /* Style for specific column groups */
    colgroup {
      background-color: lightgray; /* Background color for column groups */
    }

    col {
      width: 20%; /* Set the width for individual columns */
    }
  </style>
</head>
<body>

  <h1 style="text-align:center;">Table with 5 Columns and Span</h1>

  <table>
    <colgroup>
      <col span="2" style="background-color: lightblue;"> <!-- Span 2 columns for light blue -->
      <col style="background-color: lightgreen;"> <!-- Third column -->
      <col style="background-color: lightcoral;"> <!-- Fourth column -->
      <col style="background-color: lightyellow;"> <!-- Fifth column -->
    </colgroup>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>Country</th>
      <th>Occupation</th>
      <th>Hobby</th>
    </tr>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>USA</td>
      <td>Engineer</td>
      <td>Reading</td>
    </tr>
    <tr>
      <td>Alice</td>
      <td>30</td>
      <td>UK</td>
      <td>Designer</td>
      <td>Painting</td>
    </tr>
    <tr>
      <td>Mike</td>
      <td>22</td>
      <td>Canada</td>
      <td>Student</td>
      <td>Gaming</td>
    </tr>
    <tr>
      <td>Sarah</td>
      <td>28</td>
      <td>Australia</td>
      <td>Teacher</td>
      <td>Traveling</td>
    </tr>
    <tr>
      <td>David</td>
      <td>35</td>
      <td>Germany</td>
      <td>Chef</td>
      <td>Cooking</td>
    </tr>
  </table>

</body>
</html>
```

Empty Cells Property in Table

The **empty-cells** property in CSS is used to show or hide borders and backgrounds of empty table cells.

Empty Cells Property in Table

The **empty-cells** property in CSS is used to show or hide borders and backgrounds of empty table cells.

Syntax:

```
table {  
    empty-cells: show | hide;  
}
```

Values:

- **show**: Displays borders and backgrounds for empty cells.
- **hide**: Hides borders and backgrounds for empty cells.

Output

Table with `empty-cells`

Header 1	Header 2	Header 3
Data 1		Data 3
	Data 5	

Input

```
<!DOCTYPE html>
<html>
<head>
  <title>Empty Cells in Table</title>
  <style>
    table {
      width: 100%;
      border: 1px solid black;
    }
    th, td {
      border: 1px solid black;
      padding: 10px;
      text-align: center;
    }
    /* Show empty cells */
    table {
      empty-cells: show; /* Change to hide to see effect */
    }
  </style>
</head>
<body>

  <h2>Table with `empty-cells`</h2>
  <table>
    <tr>
      <th>Header 1</th>
      <th>Header 2</th>
      <th>Header 3</th>
    </tr>
    <tr>
      <td>Data 1</td>
      <td></td> <!-- Empty cell -->
      <td>Data 3</td>
    </tr>
    <tr>
      <td></td> <!-- Empty cell -->
      <td>Data 5</td>
      <td></td> <!-- Empty cell -->
    </tr>
  </table>

</body>
</html>
```

Border-image

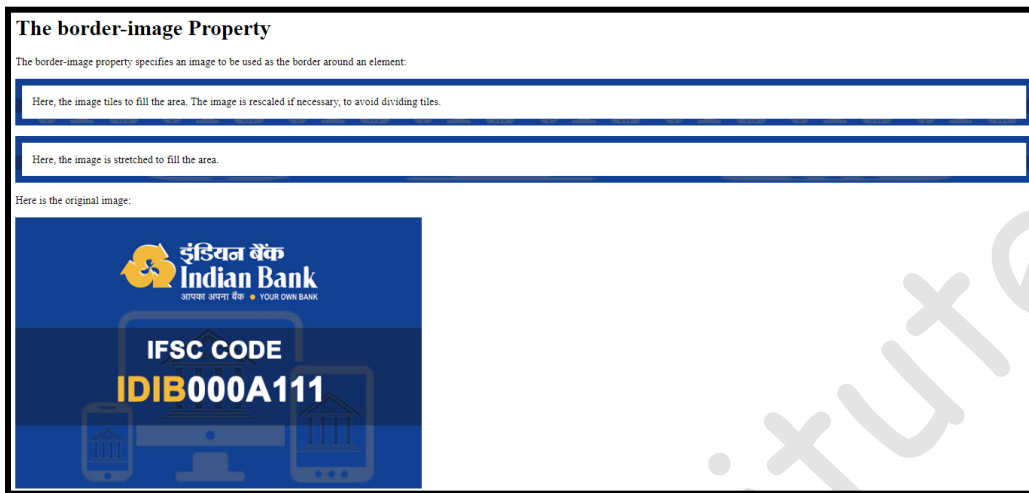
The image tiles around the border. If necessary, the image is scaled to avoid splitting tiles.

- `border-image: url(RR.png) 30 round;`

border-image with "stretch":

- The image is stretched to fill the entire border area.
 - `border-image: url(RR.png) 30 stretch;`
- 

OUTPUT



INPUT

```
<!DOCTYPE html>
<html>
<head>
<style>
#borderimg1 {
  border: 10px solid transparent;
  padding: 15px;
  border-image: url(RR.png) 30 round;
}

#borderimg2 {
  border: 10px solid transparent;
  padding: 15px;
  border-image: url(RR.png) 30 stretch;
}
</style>
</head>
<body>

<h1>The border-image Property</h1>
<p>The border-image property specifies an image to be used as the border around an element:</p>

<p id="borderimg1">Here, the image tiles to fill the area. The image is rescaled if necessary, to avoid dividing tiles.</p>
<p id="borderimg2">Here, the image is stretched to fill the area.</p>

<p>Here is the original image:</p>


</body>
</html>
```

Box Shadow /text-shadow

Box-Shadow

Definition: box-shadow is a CSS property that adds a shadow around an element, making it look like it's lifted off the page.

syntax

```
box-shadow: horizontal-offset vertical-offset blur-radius spread-radius color;
```

Text-Shadow

Definition: text-shadow is a CSS property that adds a shadow to text, making it stand out and easier to read.



syntax

```
text-shadow: horizontal-offset vertical-offset blur-radius color;
```

horizontal-offset: Distance of the shadow from the element (positive = right, negative = left).

vertical-offset: Distance of the shadow from the element (positive = down, negative = up).

blur-radius: How blurred the shadow is (higher value = more blur).

color: Color of the shadow (can use rgba for transparency).

Output

Fruit Price List

Fruit	Price (\$)
Apple	1.00
Banana	0.50
Cherry	2.00
Orange	0.80
Grapes	2.50

Input

```
<!DOCTYPE html>
<html>
<head>
  <title>Fruit Price Table</title>
  <style>
    body {
      font-family: Arial, sans-serif; /* Font style */
      background-color: #f4f4f4; /* Light gray background */
      padding: 20px; /* Add padding */
    }

    table {
      width: 60%; /* Table width */
      border-collapse: collapse; /* Collapse borders */
      margin: auto; /* Center the table */
      box-shadow: 5px 4px 15px lightgray; /* Box shadow effect */
      border-radius: 10px; /* Rounded corners */
      overflow: hidden; /* Ensures rounded corners are visible */
    }

    th, td {
      border: 1px solid #ddd; /* Light gray border */
      padding: 10px; /* Padding for cells */
      text-align: center; /* Center text */
    }

    tr {
      text-shadow: 2px 2px 2px rgba(0, 0, 0, 0.5); /* Text shadow effect */
    }

    th {
      background-color: #4CAF50; /* Green background for header */
      color: white; /* White text for header */
    }

    tr:nth-child(even) {
      background-color: #f2f2f2; /* Light gray for even rows */
    }

    tr:hover {
      background-color: #ddd; /* Darker gray on hover */
    }
  </style>
</head>
<body>

  <h1 style="text-align: center;">Fruit Price List</h1>

  <table>
    <tr>
      <th>Fruit</th>
      <th>Price ($)</th>
    </tr>
    <tr>
      <td>Apple</td>
      <td>1.00</td>
    </tr>
    <tr>
      <td>Banana</td>
      <td>0.50</td>
    </tr>
    <tr>
      <td>Cherry</td>
      <td>2.00</td>
    </tr>
    <tr>
      <td>Orange</td>
      <td>0.80</td>
    </tr>
    <tr>
      <td>Grapes</td>
      <td>2.50</td>
    </tr>
  </table>

</body>
</html>
```