

# Tables in HTML

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## Overview

Tables are used to show the tabular data. To achieve this, many tags are used. All the table data is enclosed within the **<table>** tags.

A table is divided into rows (with the **<tr>** tag), and each row is divided into data cells (with the **<td>** tag). tr stands for table row, which represents the row of a table, and td stands for table-data, which is the content of a data cell.

A data cell can contain text, images, lists, paragraphs, forms, horizontal rules, tables etc.

```
Example : <table border=1>
  <tr>
    <td>Row 1, cell 1</td>
    <td>Row 1, cell 2</td>
    <td>Row 1, cell 3</td>
  </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>
</table>
```

Output :

Row 1, cell 1	Row 1, cell 2	Row 1, cell 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

## border Attribute

The **border** attribute is used for mentioning the thickness of the borders. If you do not specify a border attribute the table will be displayed without any borders. Sometimes this can be useful, but most of the time, you want the borders to show.

## Headings in a Table

If you want to add column names, then HTML provides a separate tag for that. Headings in a table are defined with the **<th>** tag.

**Example :**

```
<table border=1>
<tr>
    <th>Column 1</th>
    <th>Column 2</th>
    <th>Column 3</th>
</tr>
<tr>
    <td>Row 1, cell 1</td>
    <td>Row 1, cell 2</td>
    <td>Row 1, cell 3</td>
</tr>
<tr>
    <td>Row 2, cell 1</td>
    <td>Row 2, cell 2</td>
    <td>Row 2, cell 3</td>
</tr>
</table>
```

Output :

Column 1	Column 2	Column 3
Row 1, cell 1	Row 1, cell 2	Row 1, cell 3
Row 2, cell 1	Row 2, cell 2	Row 2, cell 3

## <thead>, <tbody>, <tfoot>

- **<thead>** tag is used to group header content in an HTML table.
- **<tbody>** tag is used to group the body content in an HTML table.
- **<tfoot>** tag is used to group footer content in an HTML table.

Browsers use these elements to enable scrolling of the table body independently of the header and footer. Also, when **printing a large table that spans multiple pages**, these elements can enable the table header and footer to be printed at the top and bottom of each page.

```
Example : <table border=1>
          <thead>
            <tr>
              <th>Column 1</th>
              <th>Column 2</th>
              <th>Column 3 </th>
            </tr>
          </thead>
          <tbody>
            <tr>
              <td>Row 1, cell 1</td>
              <td>Row 1, cell 2</td>
              <td>Row 1, cell 3</td>
            </tr>
            <tr>
              <td>Row 2, cell 1</td>
              <td>Row 2, cell 2</td>
              <td>Row 2, cell 3</td>
            </tr>
          </tbody>
          <tfoot>
            <tr>
              <th>Column 1</th>
              <th>Column 2</th>
              <th>Column 3 </th>
            </tr>
          </tfoot>
        </table>
```

Output :

Column 1	Column 2	Column 3
Row 1, cell 1	Row 1, cell 2	Row 1, cell 3
Row 2, cell 1	Row 2, cell 2	Row 2, cell 3
Column 1	Column 2	Column 3

## caption Tag

The <caption> tag defines a table caption.

The <caption> tag must be inserted immediately after the <table> tag.

**Example :** If you add <caption>Table Example</caption> just after the <table> tag, the table will now look like -

Table Example		
Column 1	Column 2	Column 3
Row 1, cell 1	Row 1, cell 2	Row 1, cell 3
Row 2, cell 1	Row 2, cell 2	Row 2, cell 3
Column 1	Column 2	Column 3

**NOTE :** You can specify only one caption per table

## colspan and rowspan Attribute

To manage the layout of the tables, two attributes are used, **rowspan** and **colspan**.

Attribute rowspan is used to mention the **number of rows** that a particular cell will be occupying. Attribute colspan is used to mention the **number of columns** that a specific cell will be occupying.

They both are used with the **td** tag and can also be used with the **th** tag.

**Example :**

```
<table border="1">
  <thead>
    <tr>
      <th>Column 1</th>
      <th colspan="2">Column 2 and 3 heading</th>
    </tr>
  </thead>
```

```

<tbody>
  <tr>
    <td>Row 1, cell 1</td>
    <td colspan="2">(Row 1, cell 2) and (Row 1, cell 3)</td>
  </tr>
  <tr>
    <td rowspan="2">(Row 2, cell 1) and (Row 3, cell 2)</td>
    <td>Row 2, cell 2</td>
    <td>Row 2, cell 3</td>
  </tr>
  <tr>
    <td>Row 3, cell 2</td>
    <td>Row 3, cell 3</td>
  </tr>
</tbody>
</table>

```

Output :

Column 1	Column 2 and 3	
Row 1, cell 1	(Row 1, cell 2) and (Row 1, cell 3)	
(Row 2, cell 1) and (Row 3, cell 2)	Row 2, cell 2	Row 2, cell 3
	Row 3, cell 2	Row 3, cell 3