

HTML Table

- **HTML table tag** is used to display data in tabular form (row * column). There can be many columns in a row.
- We can create a table to display data in tabular form, using `<table>` element, with the help of `<tr>`, `<td>`, and `<th>` elements.
- In Each table, table row is defined by `<tr>` tag, table header is defined by `<th>`, and table data is defined by `<td>` tags.
- An HTML table may also include `<caption>`, `<colgroup>`, `<thead>`, `<tfoot>`, and `<tbody>` elements.

Table Rows

Each table row starts with a `<tr>` and end with a `</tr>` tag.

Table Cells

Each table cell is defined by a `<td>` and a `</td>` tag.

Everything between `<td>` and `</td>` are the content of the table cell.

Table Headers

Sometimes you want your cells to be headers, in those cases use the `<th>` tag instead of the `<td>` tag:

Table Border

When you create a table, it is without a border and it looks incomplete.

You can

add a border to a table by using the border attribute of the `<table>` tag.

Apart

from adding a border to a table, you can also set the thickness of the border. By default, the value of the table border is either 0 or no value is set.

```
<table border="1">
```

Example:-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>HTML table Tag</title>
```

```
</head>
```

```
<body>
```

```
<table border = "1">
```

```
<tr>
```

```
<th>Team</th>
```

```
<th>Ranking</th>
```

```
</tr>
```

```
<tr>
```

```
<td>India</td>
```

```
<td>1</td>
```

```
</tr>
```

```
<tr>
```

```
<td>South Africa</td>
```

```
<td>2</td>
```

```
        </tr>
    <tr>
        <td>Australia</td>
        <td>3</td>
    </tr>
</table>
</body>
```

```
</html>
```

Team	Ranking
India	1
South Africa	2
Australia	3

Table tag with attributes like width:-

The HTML `<table>` width Attribute is used to specify the width of a table. If width attribute is not set then it takes default width according to content.

```
<table width="pixels | %">
```

Example:-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>
```

```
        HTML table width Attribute
```

```
</title>
</head>
<body>
  <table border="1"
  width="250">
    <tr>
      <th>NAME</th>
      <th>AGE</th>
      <th>BRANCH</th>
    </tr>
    <tr>
      <td>BITTU</td>
      <td>22</td>
      <td>CSE</td>
    </tr>
  </table>
</body>
</html>
```

NAME	AGE	BRANCH
BITTU	22	CSE

HTML <table> align Attribute

The HTML <table> align Attribute is used to specify the alignment of the table and its content.

Attribute Values:

- **left:** It sets the left align to the table.

- **right:** It sets the right align to the table. ●

center: It sets the center align to the table.

```
<!DOCTYPE html>
<html>

<head>
  <title>
    HTML table align Attribute
  </title>
</head>

<body>
  <table border="1"
    align="right">
    <caption>Author Details</caption>

    <tr>
      <th>NAME</th>
      <th>AGE</th>
      <th>BRANCH</th>
    </tr>
    <tr>
      <td>BITTU</td>
      <td>22</td>
      <td>CSE</td>
    </tr>
    <tr>
      <td>RAM</td>
      <td>21</td>
      <td>ECE</td>
    </tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Output:-

NAME	AGE	BRANCH
BITTU	22	CSE
RAM	21	ECE

Cellspacing

- Cellspacing is also an attribute.
- Cellspacing specifies the space between cells (i.e) it defines the whitespace between the edges of the adjacent cells.
- **It** is used to set margin between table cells and table border. Default cellspacing is 2. Using the cellspacing attribute, we can change the margin between two cells.
- The cellspacing attribute is set in terms of pixels.

```
<table cellspacing="pixels">
```

Attribute Values:

- **pixels:** It sets the space between the cells in terms of pixels.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>
```

HTML table cellspacing Attribute

```
</title>
</head>
<body>
  <h1>GeeksforGeeks</h1>

  <h2>HTML table cellspacing Attribute</h2>

  <table border="1"
    cellspacing="15">
    <caption>Author Details</caption>

    <tr>
      <th>NAME</th>
      <th>AGE</th>
      <th>BRANCH</th>
    </tr>
    <tr>
      <td>BITTU</td>
      <td>22</td>
      <td>CSE</td>
    </tr>
    <tr>
      <td>RAM</td>
      <td>21</td>
      <td>ECE</td>
    </tr>
  </table>
</body>

</html>
```

Author Details

NAME	AGE	BRANCH
BITTU	22	CSE
RAM	21	ECE

:-

Cellpadding:-

The **HTML <table> cellpadding Attribute** is used to specify the space between the cell content and cell wall. The cellpadding attribute is set in terms of pixels.

```
<table cellpadding="pixels">
```

Attribute Values:

- **pixels:** It holds the space between the cell content and cell wall in terms of pixels.
- **Example:-**

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
  <title>
```

```
    HTML table cellpadding Attribute
```

```
  </title>
```

```
</head>
```



```
<body>
  <table border="1"
    cellpadding="15">
    <caption>Author Details</caption>
    <tr>
      <th>NAME</th>
      <th>AGE</th>
      <th>BRANCH</th>
    </tr>
    <tr>
      <td>BITTU</td>
      <td>22</td>
      <td>CSE</td>
    </tr>
    <tr>
      <td>RAM</td>
      <td>21</td>
      <td>ECE</td>
    </tr>
  </table>
</body>
```

</html>

Output:-

Author Details

NAME	AGE	BRANCH
BITTU	22	CSE
RAM	21	ECE

Cell Alignment:-You can align the contents in a cell, so they look more presentable. To align a cell's contents, the ALIGN attribute is used in the TD part of the tag.

<td align ="left | right | center">

Attribute Values:

- **left:** It sets the text left-align.
- **right:** It sets the text right-align.
- **center:** It sets the text center-align.

Example:-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>
```

```
        HTML td align Attribute
```

```
    </title>
```

```
</head>
```

```
<body>
```

```
    <table width="500" border="1">
```

```
    <tr>
```

```
        <th>NAME</th>
```

```
        <th>AGE</th>
```

```
        <th>BRANCH</th>
```

```
    </tr>
```

```
    <tr>
```

```
        <td align="center">BITTU</td>
```

```
        <td align="left">22</td>
```

```
        <td align="right">CSE</td>
```

```
    </tr>
```

```
<tr>
  <td align="center">RAKESH</td>
  <td align="left">25</td>
  <td align="right">EC</td>
</tr>
</table>
</body>
</html>
```

Output:-

NAME	AGE	BRANCH
BITTU	22	CSE
RAKESH	25	EC

Rules || <table> rules Attribute:-

The HTML <table> rules Attribute is used to specify the which parts of the inside borders that should be visible.

```
<table rules="value">
```

Attribute Values:

- **rows:** It creates line between the rows.
- **cols:** It creates line between the columns.

- **all:** It creates line between the rows and columns.

Example:-

```
<!DOCTYPE html>

<html>
<head>

    <title>

        HTML table rules Attribute

    </title>

</head>

<body>

    <table rules="rows">
    <tr>
        <th>NAME</th>
        <th>AGE</th>
        <th>BRANCH</th>
    </tr>
    <tr>
        <td>BITTU</td>
        <td>22</td>
        <td>CSE</td>
    </tr>
</table>
```


<table rules="cols">

<tr>

<th>NAME</th>

<th>AGE</th>

<th>BRANCH</th>

</tr>

<tr>

<td>BITTU</td>

<td>22</td>

<td>CSE</td>

</tr>

</table>

<table rules="all">

<tr>

<th>NAME</th>

<th>AGE</th>

<th>BRANCH</th>

</tr>

<tr>

<td>BITTU</td>

<td>22</td>

```
<td>CSE</td>
</tr>
</table>
</body>

</html>
```

Output:-

NAME	AGE	BRANCH
BITTU	22	CSE

NAME	AGE	BRANCH
BITTU	22	CSE

NAME	AGE	BRANCH
BITTU	22	CSE

Rowspan:-

- The rowspan attribute in HTML specifies the number of rows a cell should span. That is if a row spans two rows, it means it will take up the space of two rows in that table.
- It provides the same functionality as “merge cell” in the spreadsheet program like Excel.

Attribute Values: It contains a value i.e **number** Which specify the number of rows that a table cell should span.

```
<td rowspan = "value">table content...</td>
```

Example:-

```
<!DOCTYPE html>
<html>
<head>
<title>rowspan</title>
</head>
<body>
<table border="2">
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
    <td>555-8745</td>
  </tr>
</table>
</body>
</html>
```


Name	Jill
Phone	555-1234
	555-8745

Colspan:-

- To make a cell span over multiple columns, use the colspan attribute. • The colspan attribute in HTML specifies the number of columns a cell should span. It allows the single table cell to span the width of more than one cell or column.
- **Attribute Values:** It contains a value i.e **number** Which specify the number of columns that a cell should span.
- Example:-

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
<table border="1">
<tr>
<th>Month</th>
<th>Savings</th>
</tr>
<tr>
<td>January</td>
```

```
<td>$100</td>
</tr>
<tr>
<td>February</td>
<td>$80</td>
</tr>
<tr>
<td colspan="2">Sum: $180</td>
</tr>
</table>
</body>
</html>
```

Output:-

Month	Savings
January	\$100
February	\$80
Sum: \$180	

Header, Footer, Body sections

Header<thead>:-

- The <thead> tag is used to group header content in an HTML table. • The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer).
- The <thead> tag must be used in the following context: As a child of a <table> element, after any <caption>, and before any <tbody>, <tfoot>, and <tr> elements.

Footer<tfoot>:-

- The <tfoot> tag is used to group footer content in an HTML table.
- The <tfoot> tag must be used in the following context: As a child of a <table> element, after any <caption>, <thead>, and <tbody> elements.

Body<tbody>:-

- The <tbody> tag is used to group the body content in an HTML table.
- The <thead>, <tbody>, and <tfoot> elements will not affect the layout of the table by default.

However, you can use CSS to style these elements.

Example:-

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>html table </title>
```

```
</head>
```

```
<body>
```

```
<h3>The thead, tbody, and tfoot elements</h3>
```

```
<table border="1">
```

```
<thead>
```

```
<tr>
```

```
<th>Month</th>
```

```
<th>Savings</th>
```

```
</tr>
```

```
</thead>
```

```
<tbody>
```

```
<tr>
```

```
<td>January</td>
```

```
<td>100</td>
</tr>
<tr>
  <td>February</td>
  <td>200</td>
</tr>
</tbody>
<tfoot>
  <tr>
    <td>Sum</td>
    <td>300</td>
  </tr>
</tfoot>
</table>

</body>
</html>
```

Output:-

The thead, tbody, and tfoot element

Month	Savings
January	100
February	200
Sum	300

Caption Tag:-

The <caption> tag defines a table caption.

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

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>caption tag</title>
```

```
</head>
```

```
<body>
```

```
<table border="1">
```

```
<caption>Monthly savings</caption>
```

```
<tr>
```

```
<th>Month</th>
```

```
<th>Savings</th>
```

```
</tr>
```

```
<tr>
```

```
<td>January</td>
```

```
<td>$100</td>
```

```
</tr>
```

```
<tr>
```

```
<td>February</td>
```

```
<td>$50</td>
```

```
</tr>
```

```
</table>
```

```
</body>
```

```
</html>
```

Monthly savings

Month	Savings
January	\$100
February	\$50

Background images:-

The **background** attribute can also be used to control the background of an HTML element, specifically page body and table backgrounds. You can specify an image to set background of your HTML page or table.

```
<table background=""><tr background=""><td background="">
```

Example:-

`<table background="back.jpg"></table>` : Applied to an entire table

`<tr background="back.jpg"></tr>` : Applied to all cells in a row

`<td background="back.jpg"></td>` : Applied to one cell