

## 1. What is <table>?

- In HTML, <table> is used to **display data in a tabular (row–column) format.**
  - A table usually contains:
    - <tr> → table row
    - <td> → table data cell
    - <th> → table header cell
    - Optional sections: <thead>, <tbody>, <tfoot>
    - <caption> → table title
- 

## 2. Attributes of <table>

### (A) Modern (HTML5) attributes

- In **HTML5**, <table> itself does not have special attributes for design.
- Instead, it supports **global attributes** that apply to any HTML tag.  
Examples:
  - id → gives a unique name to the table (<table id="sales">)
  - class → used to style tables with CSS (<table class="report">)
  - style → inline CSS (<table style="width:100%">)
  - aria-\* → accessibility attributes like aria-label, aria-describedby
  - onclick, onmouseover → event handlers in JavaScript

In modern HTML, **styling is done with CSS**, not with table attributes.

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### (B) Legacy/Deprecated attributes (HTML4, now obsolete)

These were used earlier, but now **not recommended**. Browsers still support them for backward compatibility.

Attribute	Meaning	Example	Modern replacement
border	Sets border thickness	<table border="1">	border in CSS
cellpadding	Space inside cells	<table cellpadding="5">	padding in CSS
cellspacing	Space between cells	<table cellspacing="10">	border-spacing in CSS
width	Table width	<table width="80%">	width in CSS
height	Table height	<table height="200">	height in CSS

Attribute	Meaning	Example	Modern replacement
align	Aligns table on page	<table align="center">	margin:auto in CSS
bgcolor	Background color	<table bgcolor="yellow">	background-color in CSS
background	Background image	<table background="img.png">	background-image in CSS
bordercolor	Border color	<table bordercolor="red">	border-color in CSS
summary	Text description (for accessibility)	<table summary="Sales data">	Use <caption> or aria-describedby
frame	Which outer border to show	<table frame="box">	CSS borders
rules	Which inner borders to show	<table rules="rows">	CSS borders

These are considered **outdated** because HTML should only handle **structure**, not **design**.

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### 3. Example with Deprecated Attributes (Legacy Style)

```
<table border="1" cellpadding="5" cellspacing="5" bgcolor="lightyellow" width="70%">
<tr>
  <th>Name</th>
  <th>Marks</th>
</tr>
<tr>
  <td>Ravi</td>
  <td>85</td>
</tr>
<tr>
  <td>Neha</td>
  <td>92</td>
</tr>
</table>
```

Works, but **not recommended today**.

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**4. Example with Modern CSS (Correct Way)**

```
<table class="report">  
  <caption>Student Marks</caption>  
  <thead>  
    <tr>  
      <th>Name</th>  
      <th>Marks</th>  
    </tr>  
  </thead>  
  <tbody>  
    <tr>  
      <td>Ravi</td>  
      <td>85</td>  
    </tr>  
    <tr>  
      <td>Neha</td>  
      <td>92</td>  
    </tr>  
  </tbody>  
</table>
```

```
<style>  
table.report {  
  width: 70%;  
  border-collapse: collapse;  
  background-color: lightyellow;  
}  
table.report th, table.report td {  
  border: 1px solid black;  
  padding: 5px;  
  text-align: center;
```

```
}
```

```
</style>
```

This is the **modern and correct way**: use **CSS for styling**, **HTML only for structure**.

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### <table> Attributes: Legacy vs Modern CSS

Legacy Attribute (HTML4 – Deprecated)	What it Did	Modern CSS Equivalent
border="1"	Sets table border thickness	table { border: 1px solid black; }
cellpadding="5"	Space <b>inside</b> each cell (padding)	td, th { padding: 5px; }
cellspacing="10"	Space <b>between</b> cells (use border-collapse: collapse; to remove spacing)	table { border-spacing: 10px; }
width="70%"	Sets table width	table { width: 70%; }
height="200"	Sets table height	table { height: 200px; }
align="center"	Aligns table horizontally	table { margin: auto; }
bgcolor="yellow"	Table background color	table { background-color: yellow; }
background="img.png"	Background image	table { background-image: url(img.png); }
bordercolor="red"	Border color	table { border: 1px solid red; }
summary="Sales Data"	Accessibility description	Use <caption> or aria-describedby
frame="box"	Outer border style	table { border-style: solid; } (customize sides with border-top, border-bottom, etc.)
rules="rows"	Inner border lines only on rows	td, th { border-bottom: 1px solid black; }

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### Example – Legacy vs Modern

#### Legacy (Deprecated Way)

```
<table border="1" cellpadding="5" cellspacing="5" bgcolor="lightblue" width="70%">
```

```
<tr>
  <th>Name</th>
  <th>Marks</th>
</tr>
<tr>
  <td>Ravi</td>
  <td>85</td>
</tr>
</table>
```

**Modern (Recommended Way)**

```
<table class="report">
  <caption>Student Marks</caption>
  <tr>
    <th>Name</th>
    <th>Marks</th>
  </tr>
  <tr>
    <td>Ravi</td>
    <td>85</td>
  </tr>
</table>
```

```
<style>
table.report {
  width: 70%;
  border-collapse: collapse;
  background-color: lightblue;
}

table.report th, table.report td {
  border: 1px solid black;
  padding: 5px;
```

```
text-align: center;  
}  
</style>
```

---

**Key rule to remember:**

- **Legacy attributes = Presentation inside HTML (bad practice)**
- **Modern = Use CSS for design, HTML only for structure**