

Contents

01	Latest Technologies and Trends	01
02	Play with Google Apps	17
03	Database Management: Access 2016	37
04	Raising Queries	60
05	Designing Forms and Reports	77
06	Communication Technology	87
07	Computer Malware	104
08	Website Designing: Tables	115
09	Troubleshooting	132
10	Social Networking and Being Cyber Smart	140
11	Coding Club: Python Next Steps	153
12	Graphic Designing GIMP	169
	Tech Byte	182
	Glossary	189
	Assignment 1	192
	Assignment 2	193
	Assignment 3	194
	Famous IT Personalities	195
	Famous IT Personalities	196
	Sample National Cyber Olympiad Questions	197



8

Website Designing

Tables

CONNECT

Predict the output for the following code segment.

```
<html>
<body>
  <ol type = I start = 4>
    <li> Kilobytes
    <li> Megabytes
    <li> Gigabytes
    <li> Terabytes
  </ol>
</body>
</html>
```

LEARN

You will learn about:

- Creating a table in HTML

TASK

You need to design a web page for Activity Studio. Create a table with the name of the coaches and timings for each activity organised during the summer vacation. A tabular representation will help the students take a quick glance at the name of the coaches and timing of their classes.

CREATING A TABLE IN HTML

Tables are used to arrange and organize content. You have already learnt to create, edit and format tables in Microsoft Word. Data can also be displayed in a tabular format in HTML.

To create tables in HTML, the following tags are used.

Table 8.1 Tags used to create tables in HTML

Tag	Description
<code><table>...</table></code>	It creates the structure of a table.
<code><th>...</th></code>	It sets a column heading in a table. The contents of the heading are displayed in bold.
<code><tr>...</tr></code>	It creates a row in a table.
<code><td>...</td></code>	It stores data in a cell. It can contain HTML elements such as text, images, lists and other tables. The default alignment of cell contents is left but can be changed using the align attribute.
<code><caption>...</caption></code>	It gives the caption or title to a table. It must be inserted immediately after the <code><table></code> tag. A table should have no more than one caption.

Code 1: Create a table.

```
<html>
<body>
<!-- Create a Table -->
<table>
  <tr>
    <th> Column1 Header </th>
    <th> Column2 Header </th>
    <th> Column3 Header </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>
</body>
</html>
```

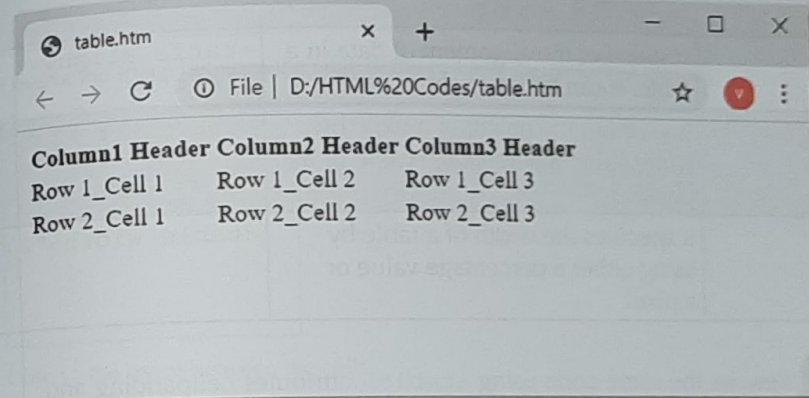


Fig. 8.1 Output

Did you notice that the table created does not have a border?

ATTRIBUTES OF `<table>` TAG

`<table>` tag defines a table in an HTML document. The attributes of `<table>` tag are listed in Table 8.2.

Table 8.2 `<table>` tag attributes

Attribute	Description	Example
b bgcolor	It sets background colour of the table.	<code><table bgcolor="#ff0000"></code>
border	It specifies the width of the border of the table. If the border attribute is not specified, the table will be displayed without any border. Also, border equal to zero means no border.	<code><table border="2"></code>

Attribute	Description	Example
bordercolor	It specifies the colour of the border by specifying either the colour code or colour name.	<code><table bordercolor="green"></code>
cellpadding	It specifies the space between the edge of the cell and the content of the cell. It is given in pixels.	<code><table cellpadding="10"></code>
cellspacing	It specifies the spaces between the cells that is the width of the cell border. It is also in pixels.	<code><table cellspacing="3"></code>
align	It specifies the alignment of data in a table. It can be left, right or center.	<code><table align="left"></code>
height	It specifies the height of a table by using either a percentage value or a pixel.	<code><table height="300"></code>
width	It specifies the width of a table by using either a percentage value or a pixel.	<code><table width="200"></code>

Code 2: Rewrite the same code using `<table>` attributes cellpadding and cellspacing.

[illegible]

Fig. 8.2 Code

Tech Help

By default, table headings are bold and centre aligned.

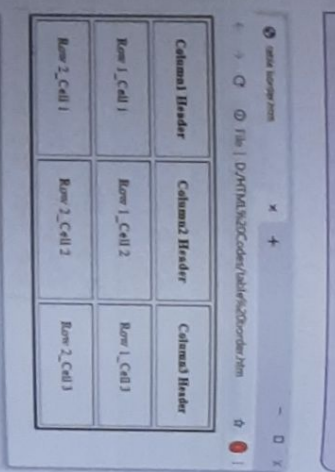


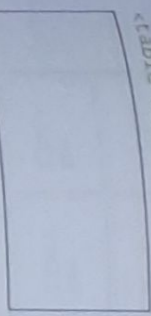
Fig. 8.3 Output

ACTIVITY 1

- A. Change the cellpadding value to 50 and draw the output table.

Code:

Col	row
table border = "3" cellpadding="50" cellspacing="5";	

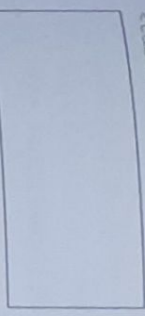


Observe the space between the edge of the cell and the content of the cell.

8. Change the cellspacing to 20.

Code:

<table border = "3" cellpadding="20" cellspacing="20" >



Observe the space between the cells.

Code 3: Change the alignment of the table.

To change the alignment of the table add align attribute to the code:

```
<table border = "3" cellpadding="20" cellspacing="5"
align = "right">
```

Observe the output, the table is aligned to the right of the web page.

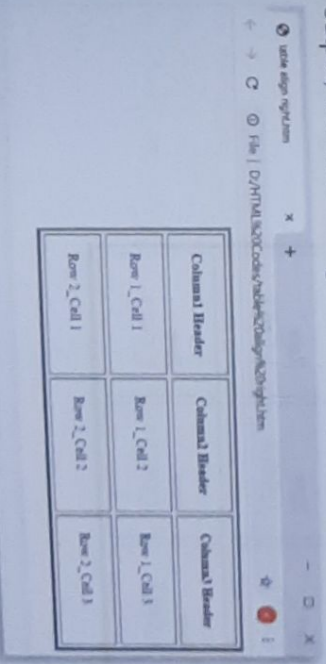


Fig. 8.4 Output

Code 4: Change the width of cells in a table.

In order to change the width of the cells, add the width attribute to the code snippet:

```
<table border = "3"
cellpadding="20"
cellspacing= "5" align
="center" width
="300">
```

Compare the width of the cells with the cells of the previous table, the width of the table changed.

Code 5: Change the height of the cells in a table.

Add the height attribute in the code:

```
<table border = "3" cellpadding="15" cellspacing= "5" width
="500" height = "200">
```

Column1 Header	Column2 Header	Column3 Header
Row 1_Cell 1	Row 1_Cell 2	Row 1_Cell 3
Row 2_Cell 1	Row 2_Cell 2	Row 2_Cell 3

Fig. 8.5 Output

Fig. 8.6 Output

ACTIVITY 2

A. What will be the output if the Cellpadding and Cellspacing attribute of table are not used in the code?

B. Open notepad file.

Add a table in the Activity Studio page. You can use the following code snippet:

```
<html>
<body>
<font face = "Lucida Calligraphy" size = "4" color = "#008080">
<dt> <h4> Activity Studio </h4> </dt>
<dd> <p align = "justify"> Art and Craft </p>
<table border = "1" cellpadding="15" cellspacing= "5" align=
"center">
<tr>
<th> Activity_Name </th>
<th> Activity_Coach </th>
<th> Activity_Time </th>
</tr>
<tr>
<td> Drawing </td>
<td> David </td>
<td> 9:00am </td>
</tr>
<tr>
<td> Calligraphy </td>
<td> Priyanka </td>
<td> 10:00 am </td>
</tr>
<tr>
<td> Painting </td>
<td> David </td>
<td> 10:00 am </td>
</tr>
<tr>
<td> Origami </td>
```

```

        <td> Priyanka </td>
        <td> 11:00 am </td>
    </tr>
    </tr>
    <tr>
        <td> Quilling </td>
        <td> Anjali </td>
        <td> 8:00 am </td>
    </tr>
</table>
<dd> <p align = "justify"> Cooking </p>

<table border= "1" cellpadding="15" cellspacing= "5" align=
"center">
    <tr>
        <th> Actity_Name </th>
        <th> Activity_Coach </th>
        <th> Activity_Time </th>
    </tr>
    <tr>
        <td> Chocolate Making </td>
        <td> Jane </td>
        <td> 9:30am </td>
    </tr>
    <tr>
        <td> Soups & Salads </td>
        <td> Richa </td>
        <td> 10:30 am </td>
    </tr>
    <tr>
        <td> Baking </td>
        <td> Rosy </td>
        <td> 5:00 pm </td>
    </tr>
</tr>
</tr>

```



```

<tr>
  <td> Desserts </td>
  <td> Bina </td>
  <td> 6:00 pm </td>
</tr>
</tr>
<tr>
  <td> Snacks </td>
  <td> Cynthia </td>
  <td> 8:00 am </td>
</tr>
</table>
</font>
</body>
</html>

```

You may add more activities by adding rows in the table. The table will look like as shown below:

The screenshot shows a web browser window with the address bar displaying 'D:\HTML%20Codes\Activity%20Studio.htm'. The page content is titled 'Activity Studio' and contains two sections: 'Art and Craft' and 'Cooking'. Each section contains a table with three columns: 'Activity_Name', 'Activity_Coach', and 'Activity_Time'.

Activity_Name	Activity_Coach	Activity_Time
Drawing	David	9:00 am
Calligraphy	Priyanka	10:00 am
Painting	David	10:00 am
Origami	Priyanka	11:00 am
Quilling	Anjali	8:00 am

Activity_Name	Activity_Coach	Activity_Time
Chocolate Making	Jane	9:30 am
Soups & Salads	Richa	10:30 am
Baking	Ravi	3:00 pm
Desserts	Bina	6:00 pm
Snacks	Cynthia	8:00 am

C. Add background colour, border colour and caption to the table as given in the following code snippet:

For Art and Craft:

```
<table border= "1" bgcolor= "#ecddd" bordercolor= "green"
cellpadding="15" cellspacing= "5" align= "center">
<caption> <b> Activity Details </b> </caption> </tr>
```

For Cooking:

```
<table border= "1" bgcolor= "#fffef0" bordercolor= "red"
cellpadding="15" cellspacing= "5" align= "center">
<caption> <b> Activity Details </b> </caption> </tr>
```

Activity Studio

Art and Craft

Activity_Name	Activity_Coach	Activity_Time
Drawing	David	9:00 am
Calligraphy	Priyanka	10:00 am
Painting	David	10:00 am
Origami	Priyanka	11:00 am
Quilling	Anjali	8:00 am

Cooking



Activity_Name	Activity_Coach	Activity_Time
Chocolate Making	Jane	9:30am
Soups & Salads	Richa	10:30 am
Baking	Rory	5:00 pm
Desserts	Bina	6:00 pm
Snacks	Cynthia	8:00 am

RECAP

- `<table>` tag defines the structure of the table.
- `<th>` tag defines a header cell in a table.
- `<tr>` tag defines a row in a table.
- `<td>` tag defines a cell in a table.

CHECKLIST

Put a ✓ to show whether you have understood these terms or need help.

Term	 I got it!	 I need help!
Table		
Table attributes		

ASSESS

A Fill in the blanks with the help of the given words.

Caption Width `<table>` Cellpadding `<th>...</th>`

1. The tag to start a table is
2. The tag is used to give the title to a table.
3. attribute of `<table>` tag specifies the width of a table by using either a percentage value or a pixel.
4. tag gives a column heading in a table.
5. is an attribute of the `<table>` tag to set the distance between the cell content and the boundary.

B Tick (✓) the correct answer.

1. Which tag adds a row to a table?

a. <code><tr></code>	b. <code><tr></code>	c. <code><table></code>	d. <code><trrows></code>
----------------------------	----------------------------	-------------------------------	--------------------------------
2. The tag that stores data in a cell.

a. <code><td>...</td></code>	b. <code><tr>...</tr></code>
c. <code><th>...</th></code>	d. <code><table>...</table></code>

EXTEND

You have learnt to merge cells in Microsoft Word and Microsoft Excel. How do you think you can merge cells in HTML?

Following attributes of `<tr>`, `<th>` and `<td>` will further enhance the presentation of the table.

Attribute	Description	Example
<code><colspan></code>	Merges the cells of a column(s) in a table. It is used inside the <code><td></code> and <code></td></code> tags. Value is the number of columns to be merged.	<code><td colspan = "3"></code>
<code><rowspan></code>	Merges the cells of a row(s) in a table. It is used inside the <code><td></code> and <code></td></code> tags. Value is the number of rows to be merged.	<code><td rowspan = "3"></code>
<code><thead></code>	Groups the header content in a table.	<code><colspan>; <rowspan>; bgcolor; align</code>
<code><tfoot></code>	Groups the footer content in a table.	<code><colspan>; <rowspan>; bgcolor; align</code>

Open the Activity Studio project. In the table Activity Studio Details, add a table header. Centre align the content and highlight the rows.

Consider the following code snippet.

```
<dt> <h4> Activity Studio </h4> </dt>
<dd> <p align = "justify"> Art and Craft </p>
<table border= "1" cellpadding="15" cellspacing= "5" align= "center">
<thead>
  <tr>
    <td colspan = "3" bgcolor="blue" align ="center"> Batch 3 </td>
  </tr> </thead>
  <tr>
    <th> Actity_Name </th>
    <th> Activity_Coach </th>
    <th> Activity_Time </th>
  </tr>
  <tr>
    <td> Drawing </td>
```

```
<td> David </td>
<td> 9:00 am </td>
</tr>
<tr>
  <td> Calligraphy </td>
  <td> Priyanka </td>
  <td> 10:00 am </td>
</tr>
<tr>
  <td> Painting </td>
  <td> David </td>
  <td> 10:00 am </td>
</tr>
</tr>
<tr>
  <td> Origami </td>
  <td> Priyanka </td>
  <td> 11:00 am </td>
</tr>
</tr>
<tr>
  <td> Quilling </td>
  <td> Anjali </td>
  <td> 8:00 am </td>
</tr>
</table>
<dd> <p align = "justify"> Cooking </p>
<table border= "1" cellpadding="15" cellspacing= "5" align= "center">
<thead>
  <tr>
    <td colspan = "3" bgcolor="blue" align ="center"> Batch 5 </td>
  </tr> </thead>
```

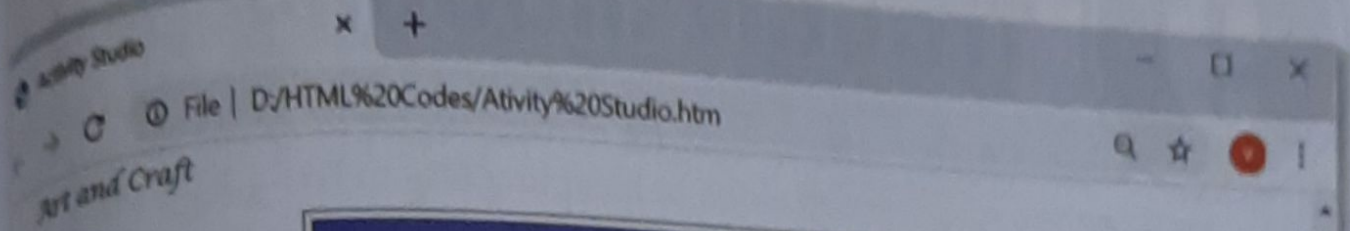


```

<tr>
  <th> Activity_Name </th>
  <th> Activity_Coach </th>
  <th> Activity_Time </th>
</tr>
<tr>
  <td> Chocolate Making </td>
  <td> Jane </td>
  <td> 9:30am </td>
</tr>
<tr>
  <td> Soups & Salads </td>
  <td> Richa </td>
  <td> 10:30 am </td>
</tr>
<tr>
  <td> Baking </td>
  <td> Rosy </td>
  <td> 5:00 pm </td>
</tr>
<tr>
  <td> Desserts </td>
  <td> Bina </td>
  <td> 6:00 pm </td>
</tr>
<tr>
  <td> Snacks </td>
  <td> Cynthia </td>
  <td> 8:00 am </td>
</tr>
</table>

```

you will get the following output.



Batch 3		
Activity_Name	Activity_Coach	Activity_Time
Drawing	David	9:00 am
Calligraphy	Priyanka	10:00 am
Painting	David	10:00 am
Origami	Priyanka	11:00 am
Quilling	Anjali	8:00 am

Cooking

Batch 3		
Activity_Name	Activity_Coach	Activity_Time
Chocolate Making	Jane	9:30am
Soups & Salads	Richa	10:30 am
Baking	Rosy	5:00 pm
Desserts	Bina	6:00 pm
Snacks	Cynthia	8:00 am