Let’s Use the Table Elements

1. Adding a Title to a Column

You can specify the title of a particular cell or column by using the TH element. For example, when you create an employee table containing employee id, employee name, date of birth (DOB), date of joining (DOJ), and address fields, you can specify these fields as table headers to facilitate better understanding. The column title must be the first row of the table and after that you can create any number of rows to store the data.

Let's create a Web page named ColTitle.html to learn how to add a title to a column.

```html
<!DOCTYPE HTML>
<html>
<head>
<title>Adding a title to a column</title>
</head>
<body>
<table border="1">
<tr>
<th>Emp Id</th>
<th>Emp name</th>
<th>DOB</th>
<th>DOJ</th>
<th>Address</th>
</tr>
<tr>
<td>901</td>
<td>Harish</td>
<td>15-03-1988</td>
<td>01-01-2009</td>
<td>D-26, sector 62, Noida</td>
</tr>
<tr>
<td>002</td>
<td>Pankaj</td>
<td>19-12-1980</td>
<td>25-08-2009</td>
<td>H no. 405, vijay nagar, Ghaziabad</td>
</tr>
<tr>
<td>003</td>
<td>Rohit</td>
<td>25-11-1970</td>
<td>ll-ll-2006</td>
<td>H no. 123, South Ext, Dehi</td>
</tr>
</table>
</body>
</html>
```

we have created a Web page that contains a table with five columns. We have used the TH element to specify the header of the columns as Emp Id, Emp name, DOB, DOJ, and Address.

Output:

<table>
<thead>
<tr>
<th>Emp Id</th>
<th>Emp name</th>
<th>DOB</th>
<th>DOJ</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>901</td>
<td>Harish</td>
<td>15-03-1988</td>
<td>01-01-2009</td>
<td>D-26, sector 62, Noida</td>
</tr>
<tr>
<td>002</td>
<td>Pankaj</td>
<td>19-12-1980</td>
<td>25-08-2009</td>
<td>H no. 405, vijay nagar, Ghaziabad</td>
</tr>
<tr>
<td>003</td>
<td>Rohit</td>
<td>25-11-1970</td>
<td>ll-ll-2006</td>
<td>H no. 123, South Ext, Dehi</td>
</tr>
</tbody>
</table>

2. Adding a Caption to a Table

A caption is short descriptions that provides a brief explanation about the table and helps you understand its purpose. For example, when you create a table that contains the information about employees, you can specify a relevant caption to it, such as Employee Details. You can add a caption to a table by using with the CAPTION element.

Let's create a Web page named TableCaption.html to learn how to add a caption to a table.

```html
<!DOCTYPE HTML>
<html>
<head>
<title>Adding caption to a table</title>
</head>
<body>
<table border="1">
<caption><b>Employee Details</b></caption>
</table>
</body>
</html>
```
3. Specifying the Properties of the Columns

You can specify or change the default properties of the table column by using the elements provided by HTML. The properties of a table column include the background color, font color, and font size.

You can use the COLGROUP element to specify the properties of multiple columns simultaneously. However, to specify the properties of single column, you can use the COL element. Now, let's discuss about changing the properties of multiple columns as well as a single column.

Changing the Properties of Multiple Columns

As discussed, the COLGROUP element is used to change the properties of multiple columns. Now, let's create a Web page, named colgroup.html to learn how to change the properties of multiple columns.

<!DOCTYPE HTML>
<HTML><HEAD><TITLE>changing the Properties of Multiple columns </TITLE></HEAD>
<BODY>
<TABLE border="1">
<CAPTION><B>Employee Details</B></CAPTION>
<COLGROUP span="2" style="background-color:yellow"> </COLGROUP>
<TR><TH>Emp Id</TH><TH>Emp name</TH><TH>DOB</TH> <TH>DJB</TH> <TH>Address</TH></TR>
<TR><TD>901</TD> <TD>Harish</TD> <TD>15-03-1988</TD> <TD>01-01-2009</TD> <TD>D-26, sector 62, Noida</TD> </TR>
<TR><TD>002</TD> <TD>Pankaj</TD> <TD>19-12-1980</TD> <TD>25-08-2009</TD> <TD>H no. 405, vijay nagar, Ghaziabad</TD> </TR>
<TR><TD>003</TD> <TD>Rohit</TD> <TD>25-11-1970</TD> <TD>ll-ll-2006</TD> <TD>H no. 123, South Ext, Delhi</TD> </TR>
</TABLE>
</BODY></HTML>
Changing the Properties of a Single Column
As you know, the COL element is used to change the properties of a single column. Let’s create a Web page, named col.html to learn how to change the properties of a single column.

<!DOCTYPE HTML>
<html>
<head>
<title>changing the Properties of single Column</title>
</head>
<body>
<table border="1">
<caption><b>Employee Details</b></caption>
<col style="background-color:green" />
<col style="background-color:orange" />
<tr><th>Emp Id</th><th>Emp name</th><th>DOB</th><th>DJB</th><th>Address</th></tr>
<tr><td>901</td><td>Harish</td><td>15-03-1988</td><td>01-01-2009</td><td>D-26, sector 62, Noida</td></tr>
<tr><td>002</td><td>Pankaj</td><td>19-12-1980</td><td>25-08-2009</td><td>H no. 405, vijay nagar, Ghaziabad</td></tr>
<tr><td>003</td><td>Rohit</td><td>25-11-1970</td><td>ll-ll-2006</td><td>H no. 123, South Ext, De1hi</td></tr>
</table>
</body>
</html>

Output:

4. Creating Advanced Tables
As discussed, to create a table you require five elements—TABLE, CAPTION, TR, TH, and TD. HTML also provides some new elements to create more structured and formatted tables, which are known as advanced tables. These elements are listed as follows:
1. **The THEAD element** — Contains rows, headings, and cells that make up the head of the table.

2. **The TFOOT element** — Creates a footer of the table that appears at the end of the table.

3. **The TBODY element** — Contains body of the table, that is, the table data.

The THEAD and TFOOT elements occur only once while the TBODY element can occur multiple times in the table for grouping the rows. Let’s create a Web page, named AdTable.html which shows an example of creating a table using the THEAD, TFOOT, and TBODY elements.

```html
<!DOCTYPE HTML>
<html>
<head>
<title>Advanced Tables</title>
</head>
<body>
<table border=1>
<caption><b>Employee Details</b></caption>
<thead>
<tr><th>Emp Id</th> <th>Emp name</th> <th>DOB</th> <th>DOJ</th> <th>Address</th></tr>
</thead>
<tfoot>
<tr><th colspan="5">This table contains "information about the employees."</th></tr>
</tfoot>
<tbody>
<tr><td>901</td> <td>Harish</td> <td>15-03-1988</td> <td>01-01-2009</td> <td>D-26, sector 62, Noida</td></tr>
<tr><td>002</td> <td>Pankaj</td> <td>19-12-1980</td> <td>25-08-2009</td> <td>H no. 405, vijay nagar, Ghaziabad</td></tr>
<tr><td>003</td> <td>Rohit</td> <td>25-11-1970</td> <td>ll-ll-2006</td> <td>H no. 123, South Ext, Delhii</td></tr>
</tbody>
</table>
</body>
</html>
```

Output:

![Table](image)

**Employee Details**

<table>
<thead>
<tr>
<th>Emp Id</th>
<th>Emp name</th>
<th>DOB</th>
<th>DOJ</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>901</td>
<td>Harish</td>
<td>15-03-1988</td>
<td>01-01-2009</td>
<td>D-26, sector 62, Noida</td>
</tr>
<tr>
<td>002</td>
<td>Pankaj</td>
<td>19-12-1980</td>
<td>25-08-2009</td>
<td>H no. 405, vijay nagar, Ghaziabad</td>
</tr>
<tr>
<td>003</td>
<td>Rohit</td>
<td>25-11-1970</td>
<td>ll-ll-2006</td>
<td>H no. 123, South Ext, Delhii</td>
</tr>
</tbody>
</table>

This table contains "information about the employees.

5. **Nesting Tables**

In HTML, you can also create nested tables, that is, you can create a table inside another table. For example, consider a situation where you need to design a Web page for displaying the information about the employees, which is stored in two different tables. The first table contains the id and name of the employees and the second table contains the date of birth, date of joining, and address of the employees. In such a situation, you can store these two tables into a single table, known as nested table. Let’s create a Web page named NestTable.html which shows an example of creating a nested table.

```html
<!DOCTYPE HTML>
<html>
<head>
<title>Nesting a Table</title>
</head>
<body>
<table border=1>
<caption><b>Employee Details</b></caption>
<thead>
<tr><th>Emp Id</th> <th>Emp name</th> <th>DOB</th> <th>DOJ</th> <th>Address</th></tr>
</thead>
<td rowspan="3">This table contains "information about the employees."</td>
<tr><td>901</td> <td>Harish</td> <td>15-03-1988</td> <td>01-01-2009</td> <td>D-26, sector 62, Noida</td></tr>
<tr><td>002</td> <td>Pankaj</td> <td>19-12-1980</td> <td>25-08-2009</td> <td>H no. 405, vijay nagar, Ghaziabad</td></tr>
<tr><td>003</td> <td>Rohit</td> <td>25-11-1970</td> <td>ll-ll-2006</td> <td>H no. 123, South Ext, Delhii</td></tr>
</tbody>
</table>
</body>
</html>
```

Output:

<table>
<thead>
<tr>
<th>Emp Id</th>
<th>Emp name</th>
<th>DOB</th>
<th>DOJ</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>901</td>
<td>Harish</td>
<td>15-03-1988</td>
<td>01-01-2009</td>
<td>D-26, sector 62, Noida</td>
</tr>
<tr>
<td>002</td>
<td>Pankaj</td>
<td>19-12-1980</td>
<td>25-08-2009</td>
<td>H no. 405, vijay nagar, Ghaziabad</td>
</tr>
<tr>
<td>003</td>
<td>Rohit</td>
<td>25-11-1970</td>
<td>11-11-2006</td>
<td>H no. 123, South Ext, Delhi</td>
</tr>
</tbody>
</table>

**Exercise:**

1: Write short note on TOBDY, THEAD and TFOOT?
2: Write difference between <COLGROUP> and <COL> tag?