

## HTML Basics

### Table Elements

HTML provides you the TABLE element to create a table. The TABLE element helps you to display the information in more than one dimension, i.e. in a tabular format. A table consists of columns and rows, where each row is divided into several data cells. A cell can contain text, lists, images, forms, and other tables. A table in a Web page can be defined by using the starting and ending tags of the TABLE element. The following code snippet shows an example of using the TABLE element

```
<TABLE> ...the other table elements and the data... </TABLE>
```

Following are the elements used in the TABLE element:

1. CAPTION
2. COLGROUP
3. COL
4. TBODY
5. THEAD
6. TFOOT
7. TR
8. TD
9. TH

### 1. The CAPTION Element

The CAPTION element is used to create the caption of a table and is used in conjunction with the TABLE element. A table should have only one CAPTION element and it must be placed after the starting tag of the TABLE element. The following code snippet shows an example of using the CAPTION element

```
<TABLE><CAPTION>Here goes the caption of a table.</CAPTION></TABLE>
```

You can change the color and font of the caption by specifying the style attribute in the CAPTION element.

### 2. The COLGROUP Element

The COLGROUP element is used to specify the properties, such as font color, and background color, border, for a group of columns in a table. This element is useful in applying a style to multiple columns without defining the style again and again for each cell. The COLGROUP element must be placed after the CAPTION element and before the TBODY, THEAD, TFOOT, TR elements. You can use the span attribute of the COLGROUP element to specify the number of columns on which you want to apply properties; the following code snippet shows an example of using the COLGROUP element:

```
<TABLE><CAPTION>Here goes the caption of a table.</CAPTION>  
<COLGROUP span=" 3" style="color:blue" > </COLGROUP ></TABLE>
```

In the preceding code snippet, we have defined the value of the span attribute as 3, which means that the style specified in the style attribute of the COLGROUP element is applied to 3 columns of the table. If the span attribute is not defined then the COLGROUP element takes the default value 1.

### 3. The COL Element

Unlike the COLGROUP element, the COL element is used to define the properties of each column, of a table separately. The COL element can be defined in the COLGROUP element which itself is defined in the TABLE element. Each COL element in the COLGROUP element represents a column of the table. The following code snippet shows an example of using the COL element:

```
<TABLE><COL style="background-color:green" />
      <COL style="background-color:orange" /></TABLE>
```

In the preceding code snippet, we have defined two COL elements where each element represents one column of a table.

### 4. The TBODY Element

The TBODY element is used to group the rows of a table and is used in conjunction with the THEAD and TFOOT elements. These three elements determine the body, head, and footer of the table. They allow you to scroll freely throughout the body section and provide a fixed height to the table. The following code snippet shows an example of using the TBODY element:

```
<TABLE><THEAD> ..... </THEAD>
<TFOOT> .....</TFOOT>
<TBODY>
<TR><TD> This is first cell of the table </TD><TD> This is second cell of the table </TD></TR>
<TR><TD> This is third cell of the table </TD><TD> This is fourth cell of the table </TD></TR>
<TR><TD> This is fifth cell of the table </TD><TD> This is sixth cell of the table </TD></TR>
</TBODY></TABLE>
```

In the preceding code snippet, we have defined the TBODY element of the table that contains the TR and TD elements to define the table rows and columns.

### 5. The THEAD Element

The THEAD element is used to define the header for the table and is used in conjunction with the TBODY and TFOOT elements. You must define the THEAD element as a child of the TABLE element after the CAPTION and COLGROUP elements and before the TBODY, TFOOT, and TR elements. The following code snippet shows an example of using the TBODY element:

```
<TABLE><THEAD>
<TR> <TD colspan="2"> This is Table Header </TD></TR>
</THEAD>
<TFOOT> .... </TFOOT>
<TBODY>
<TR><TD> This is first cell of the table </TD><TD> This is second cell of the table </TD></TR>
<TR><TD> This is third cell of the table </TD><TD> This is fourth cell of the table </TD></TR>
<TR><TD> This is fifth cell of the table </TD><TD> This is sixth cell of the table </TD></TR>
</TBODY></TABLE>
```

In the preceding code snippet, we have used the THEAD element of the table to define the header of the table rows and columns.

## 6. The TFOOT Element

The TFOOT element is used to define the footer for the table and is used in conjunction with the TBODY and the THEAD elements. You must define the TFOOT element as a child of the TABLE element after the CAPTION, COLGROUP, and THEAD elements and before the TBODY and TR elements. The following code snippet shows an example of using the TBODY element:

```
<TABLE><THEAD><TR> <TD colspan="2"> This is Table Header </TD></TR></THEAD>
<TFOOT><TR> <TD colspan="2">This is Table Footer </TD></TR></TFOOT>
<TBOOY>
<TR><TD> This is first cell of the table </TD><TD> This is second cell of the table </TD></TR>
<TR><TD> This is third cell of the table</TD><TD> This is fourth cell of the table </TD></TR>
<TR><TD> This Is fifth cell of the table </TD><TD> This is sixth cell of the table </TD></TR>
</TBODY>
</TABLE>
```

In the preceding code snippet, we have used the TFOOT element to define the footer of the table rows and columns.

NOTES : In addition to simple tables, in HTML, you can create more structured and formatted tables, which are known as advanced tables, by using the THEAD. TFOOT. and TBODY elements.

## 7. The TR Element

The TR element is used to define the rows of a table. A row contains one or more table cells and table data. You can use the TR element in the following contexts:

- Child of a THEAD element
- Child of a TBODY dement
- Child of a TFOOT element
- O Child of a TABLE element, after any CAPTION, COLGROUP, and THEAD elements

The following code snippet shows an example of using the TR element:

```
<TABLE>
<TR><TD> This is first call of the table </TD><TD> This is second cell of the table </TD></TR>
</TABLE>
```

In the preceding code snippet, we have defined the TR element in the TABLE element to display a row in the table.

## 8. The TD and TH Elements

In HTML, a table contains one or more cells that are divided into two categories - standard cells and header cells. The standard cells of a table contain table data, which can be text, images, links, and other tables. These cells are created by using the TD element. The following code snippet shows how to create a standard cell:

```
<TABLE>
<TR><TD> This is first call of the table </TD><TD> This is second cell of the table </TD></TR>
</TABLE>
```

The header cell of a table contains the header information, which can be the heading of a column and other content. The header cells are created by using the TH element. The following code snippet shows how to create a header cell:

```
<TABLE>
<TR><TH> First header cell </TH><TH> second header cell </TH></TR>
<TR><TD> First standard cell </TD><TD> second standard cell </TD></TR>
</TABLE>
```

In the TH element, you can use the colspan and rowspan attributes to define the header for multiple columns or rows.

## Table assignment

Lets Design following Table

Year	Sales		
	North	South	Total
2000	Rs. 6 Crores	Rs. 8 Crores	Rs. 20 Crores
2001	Rs. 11 Crores	Rs. 11 Crores	Rs. 22 Crores
2002	Rs. 10 Crores	Rs. 17 Crores	Rs. 27 Crores
2003	Rs. 18 Crores	Rs. 12 Crores	Rs. 30 Crores
2004	Rs. 20 Crores	Rs. 18 Crores	Rs. 38 Crores

```
<HTML>
<HEAD>
<TITLE>Assignment table </TITLE> </HEAD>
<BODY>
<table border = "1" cellpadding = "10" width= "80%">
<tr align = "center"><th rowspan = "2">Year</th><th colspan = "3">Sales </th></tr>
<tr align = "center"> <th> North</th> <th>South</th> <th>Total</th> </tr>
<tr align = "center"><td>2000</td><td>Rs. 12 Crores</td><td>Rs. 8 Crores </td><td> Rs. 20 Crores</td></tr>
<tr align = "center"><td>2001</td><td>Rs. 11 Crores</td><td>Rs. 11 Crores </td><td>Rs. 22 Crores</td></tr>
<tr align = "center"><td>2002</td><td>Rs. 10 Crores</td><td>Rs. 17 Crores </td><td>Rs. 27 Crores</td></tr>
<tr align = "center"><td>2003</td><td>Rs. 18 Crores</td><td>Rs. 12 Crores </td><td>Rs. 30 Crores</td></tr>
<tr align = "center"><td>2004</td><td>Rs. 20 Crores</td><td>Rs. 18 Crores </td><td>Rs. 38 Crores</td></tr>
</table>
</BODY>
</HTML>
```

Save the file with TABLE1.HTML

### Exercise:

- 1: What is the Table elements in html code?
- 2: Write difference between <TD> and <TH> tag?
- 3: What is the purpose of using <CAPTION> tag ?