# 2.3 Tables

There are several types of information that need to be displayed in a grid or table. For example: sports results, stock reports, and train timetables.

## Basic tables structure

The **<table>** element is used to create a table. The contents of the table are written out row by row.

You indicate the start of each row using the opening **<tr>** tag. (The tr stands for table row). At the end of the row you use a closing **</tr>** tag.

Each cell of a table is represented using a **<td>** element. (The td stands for table data.)

**Example)** Create a table with the following information

**DISPLAY**

| Column 1 | Column 2 | Column 3 |
|----------|----------|----------|
| 45 | 60 | 45 |
| 60 | 90 | 90 |

**HTML**

```
<table>
  <tr> <td>Column 1</td> <td> Column 2</td> <td>Column 3</td> </tr>
  <tr align="center"> <td> 45</td> <td >60</td> <td>45</td></tr>
  <tr align="center"><td>60</td> <td>90</td> <td>90</td> </tr>
</table>
```

The **<th>** element is used just like the **<td>** element but its purpose is to represent the heading for either a column or a row. (The **th** stands for table heading.)

You can use the **scope** attribute on the **<th>** element to indicate whether it is a heading for a **column** or a **row**. It can take the values row to indicate a heading for a row or col to indicate a heading for a column.

**Example)** Create the following table

**DISPLAY**

| | Saturday | Sunday |
|----------|----------|--------|
| **Tickets sold:** | 120 | 135 |
| **Total sales:** | $600 | $675 |

**HTML**

```
<table>
    <tr> <th></th> <th>Saturday</th> <th>Sunday</th></tr>
    <tr><th>Tickets sold:</th> <td align='center'>120</td> <td align='center'>135</td></tr>
    <tr><th>Total sales:</th> <td align='center'>$600</td> <td align='center'>$675</td></tr>
</table>
```

## Border and background

The **border** attribute was used on both the <table> and <td> elements to indicate the width of the border in pixels.

The **bgcolor** attribute was used to indicate background colors of either the entire table or individual table cells.

Color can code in three ways:

- By the color name such as red, blue, green, black, lightblue, etc
- By the hex color palette code. You can get the hex color palette in: http://www.color-hex.com/color-palettes
- By the combination of RGB code.

**Example)** Create a following table with table border = 2px, table background *yellow* , 2nd row to *pink* , and one cell to *lightgreen*

**HTML**

```
<table border="2" bgcolor="yellow">
    <tr>
        <th width="100"></th><th width="100">Withdrawn</th><th width="100">Credit</th>
        <th width="100">Balance</th></tr>
    <tr align="center" bgcolor="pink">
        <th>January</th><td>$250.00</td><td>$660.50</td><td>$410.50</td></tr>
    <tr align="center">
        <th>February</th><td>$135.55</td><td>$895.20</td><td  bgcolor="lightblue">$1170.15</td></tr>
</table>
```

**DISPLAY**

| | Withdrawn | Credit | Balance |
|---|---|---|---|
| January | $250.00 | $660.50 | $410.50 |
| February | $135.55 | $895.20 | $1170.15 |

## Table header, body, and footer

**<thead>, <tbody>,** and **<tfooter>** elements to specify each part of a table (body, header, footer).

Browsers can use these elements to enable scrolling of the table body independently of the header and footer. Also, when printing a large table that spans multiple pages, these elements can enable the table header and footer to be printed at the top and bottom of each page.