Session:
Tables

HTML <table> Tag

A table is an arrangement of data in rows and columns, or possibly in a more complex structure. Tables are widely used in communication, research, and data analysis.

- Tables are useful for various tasks such as presenting text information and numerical data.

- Tables can be used to compare two or more items in tabular form layout.

- Tables are used to create databases.

Defining Tables in HTML

o An HTML table is defined with the "table**"(<table>)** tag.
o Each table row is defined with the "tr" **(<tr>)**tag.
o A table header is defined with the "th" tag.**(<th>)** By default, table headings are bold and centered.
o A table data/cell is defined with the "td" **(<td>)**tag.

HTML <table> Tag

In Each table, table row is defined by <tr> tag, table header is defined by <th>, and table data is defined by <td> tags.

HTML Table Tags:

Tag	Description
<table>	It defines a table.
<tr>	It defines a row in a table.
<th>	It defines a header cell in a table.
<td>	It defines a cell in a table.
<caption>	It defines the table caption.
<colgroup>	It specifies a group of one or more columns in a table for formatting.
<col>	It is used with <colgroup> element to specify column properties for each column.
<tbody>	It is used to group the body content in a table.
<thead>	It is used to group the header content in a table.
<tfooter>	It is used to group the footer content in a table.

HTML <table> Tag

HTML Table Example: Let's see the example of HTML table tag.

Snippet:
```html
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>
</head>
<body>
<table>
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>
<tr><td>James</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
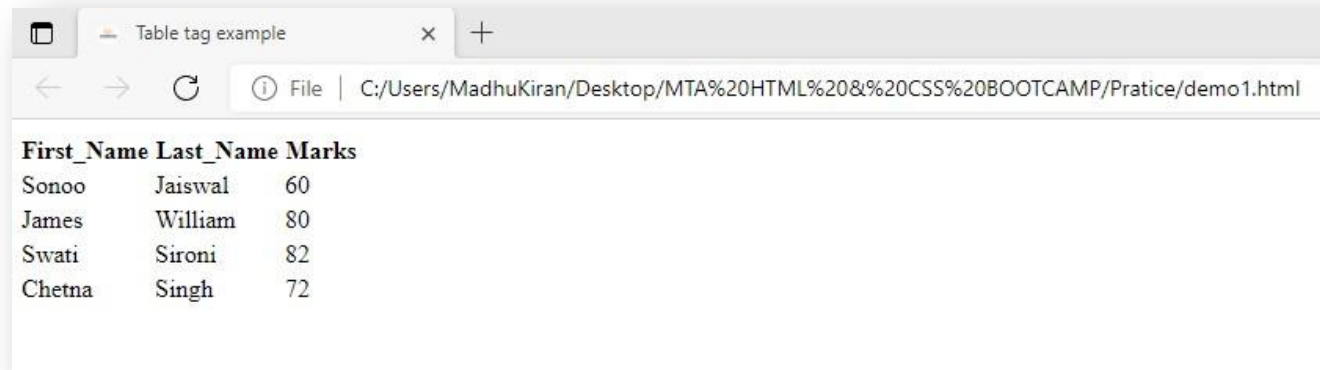
HTML \<table> Tag

HTML Table Example: Let's see the example of HTML table tag.

Output:

Browser window — Table tag example
File | C:/Users/MadhuKiran/Desktop/MTA%20HTML%20&%20CSS%20BOOTCAMP/Pratice/demo1.html

First_Name	Last_Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML <table> Tag Attributes

1. **Table tag with border Attribute:** You can use border attribute of table tag in HTML to specify border. But it is not recommended now.

Syntax: <table border = "1">

Let us illustrate the table tag with border attribute:

Snippet: Let us take previous snippet and add border syntax and make changes as follows

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>
</head>
<body>
<table border="1">
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>
<tr><td>James</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
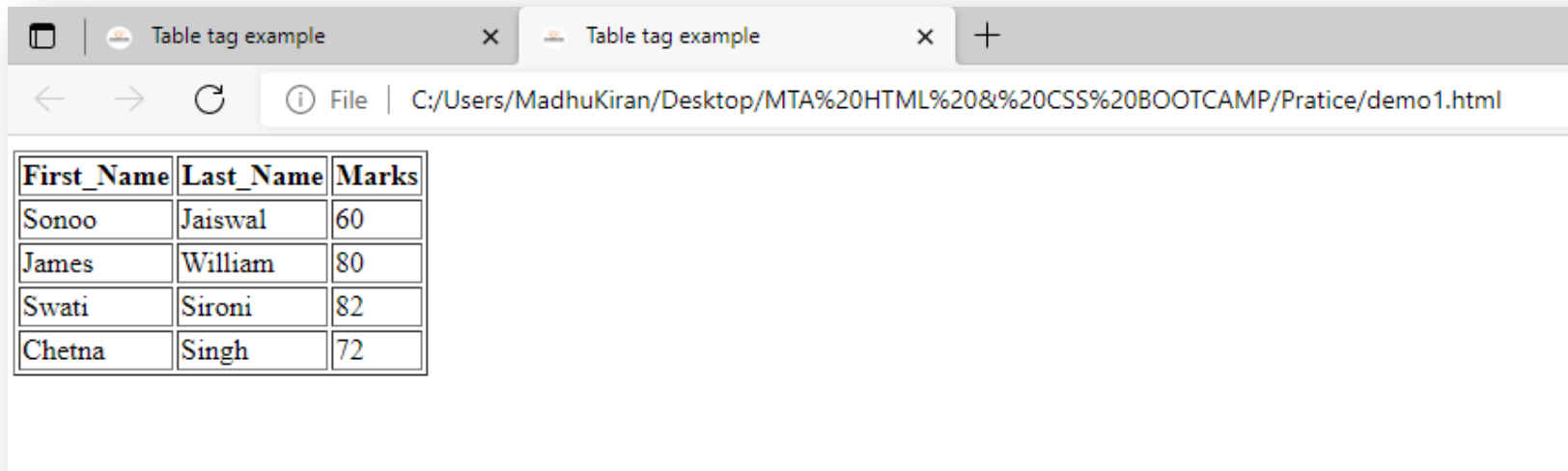
HTML <table> Tag Attributes

1. **Table tag with border Attribute: Syntax:** <table border = "1">

Let us illustrate the table tag with border attribute:

Output:

First_Name	Last_Name	Marks
Sonoo	Jaiswal	60
James	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML <table> Tag Attributes

Cellpadding and Cellspacing Attributes:

Let us illustrate the cellpadding and cellspacing attribute

Snippet:

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>

</head>
<body>
<table border="1" cellpadding="5px" cellspacing="5px">
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>Jaiswal</td><td>60</td></tr>
<tr><td>James</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
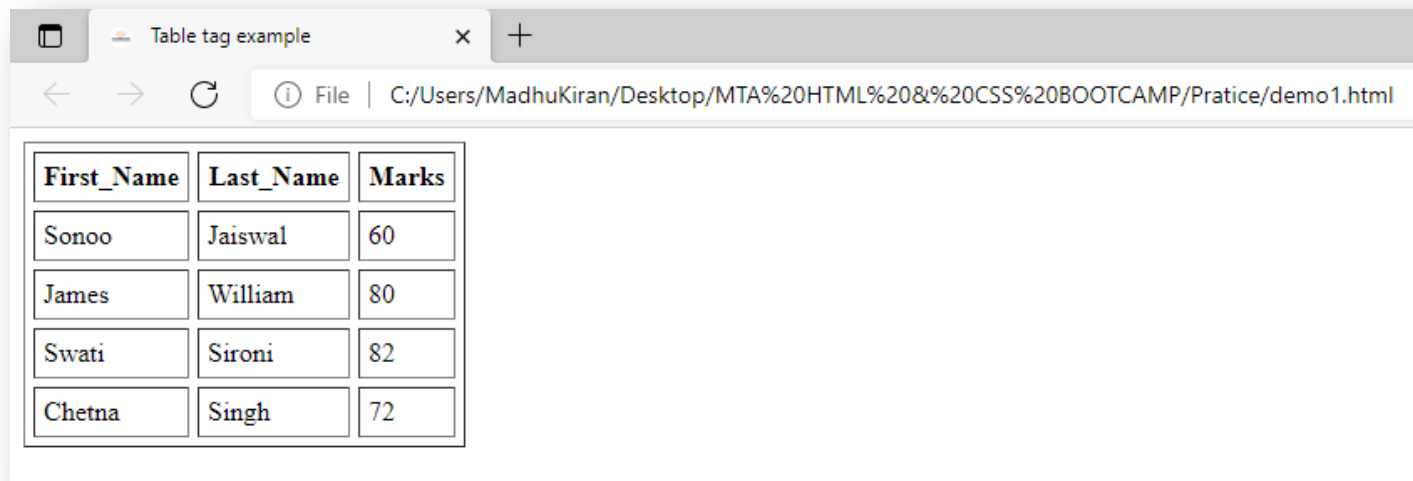
HTML <table> Tag Attributes

Cellpadding and Cellspacing Attributes:

Let us illustrate the cellpadding and cellspacing attribute

Output:

HTML <table> Tag Attributes

Colspan and Rowspan Attributes:

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Syntax:

```
<td colspan = "3">Row 3 Cell 1</td>
<td rowspan = "2">Row 1 Cell 1</td>
```

Let us modify the example and add the above syntax to our snippet

HTML <table> Tag Attributes

Colspan and Rowspan Attributes:

Let us make the changes as shown in the snippet

Rowspan Snippet: Let us add row span tag to the snippet

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>

</head>
<body>
<table border="1" >
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td rowspan="2">Sonoo</td><td>Jaiswal</td><td>60</td></tr>
<tr><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
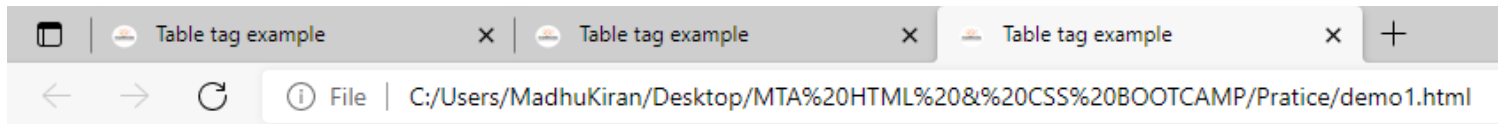
HTML <table> Tag Attributes

Colspan and Rowspan Attributes:

Let us make the changes as shown in the snippet

Output:

First_Name	Last_Name	Marks
Sonoo	Jaiswal	60
	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML <table> Tag Attributes

Colspan and Rowspan Attributes:

Let us make the changes as shown in the snippet

colspan Snippet: Let us add colspan tag to the snippet

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>


</head>
<body>
<table border="1" >
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td colspan="2">Sonoo</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
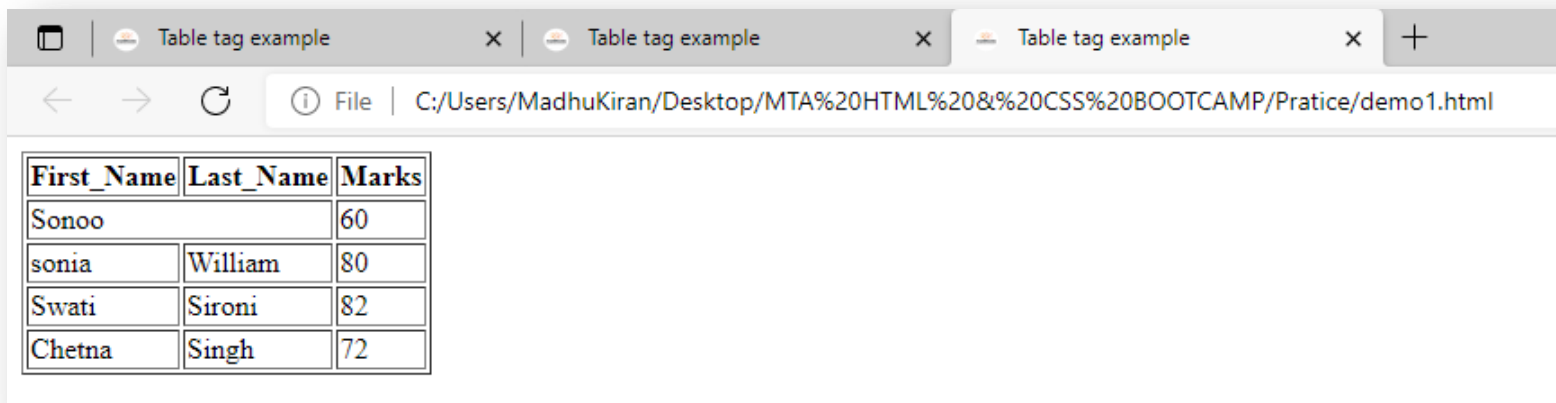
HTML <table> Tag Attributes

Colspan and Rowspan Attributes:

Let us make the changes as shown in the snippet

colspan output:

First_Name	Last_Name	Marks
Sonoo		60
sonia	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML <table> Tag Attributes

Tables Backgrounds:

You can set table background using one of the following two ways −

❑ **bgcolor** attribute − You can set background color for whole table or just for one cell.
❑ **background** attribute − You can set background image for whole table or just for one cell.
❑ **bordercolor attribute -** You can also set border color also using **bordercolor** attribute.

Syntax:

        <table border="1" bordercolor = "green" bgcolor = "yellow">
        <table border = "1" bordercolor = "green" background = "test.png">

HTML <table> Tag Attributes

Table Bacgrounds Attributes:

Let us make the changes as shown in the snippet

Border color & background color Snippet: Let us add bordercolor
And background color tag to the snippet

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>
</head>
<body>
<table border="1" bordercolor = "red" bgcolor = "yellow" >
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>singh</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
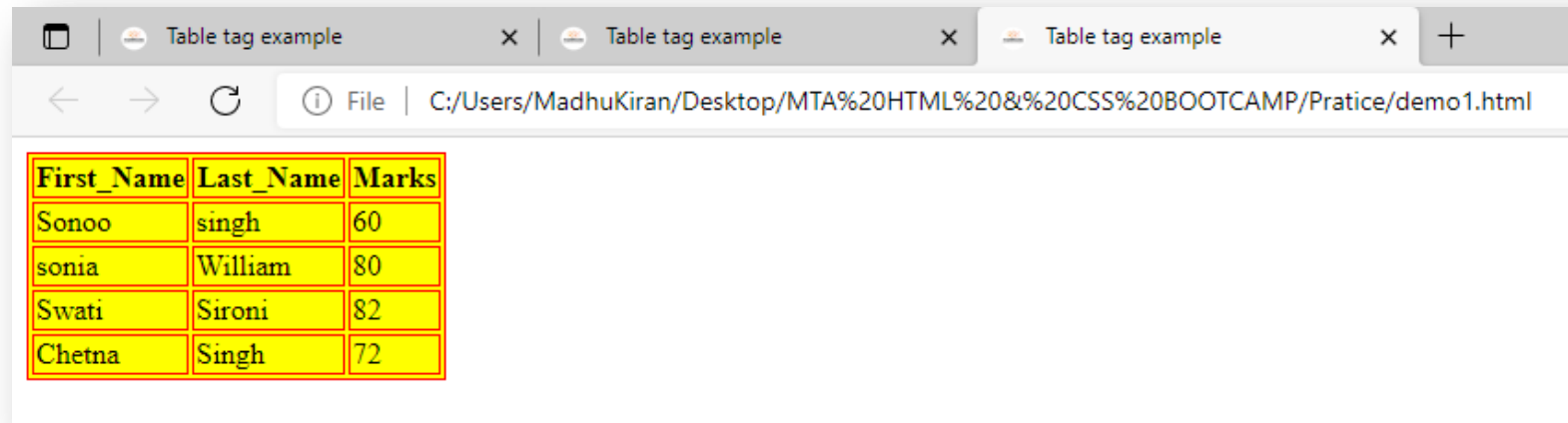
HTML <table> Tag Attributes

Table Bacgrounds Attributes:

Let us make the changes as shown in the snippet

Border color & background color Snippet output:

HTML <table> Tag Attributes

Table Bacgrounds Attributes:

Let us make the changes as shown in the snippet

background Snippet: Let us add background image to the table

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>

</head>
<body>
<table border="1" bordercolor = "red" background = "demo.png">
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>singh</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
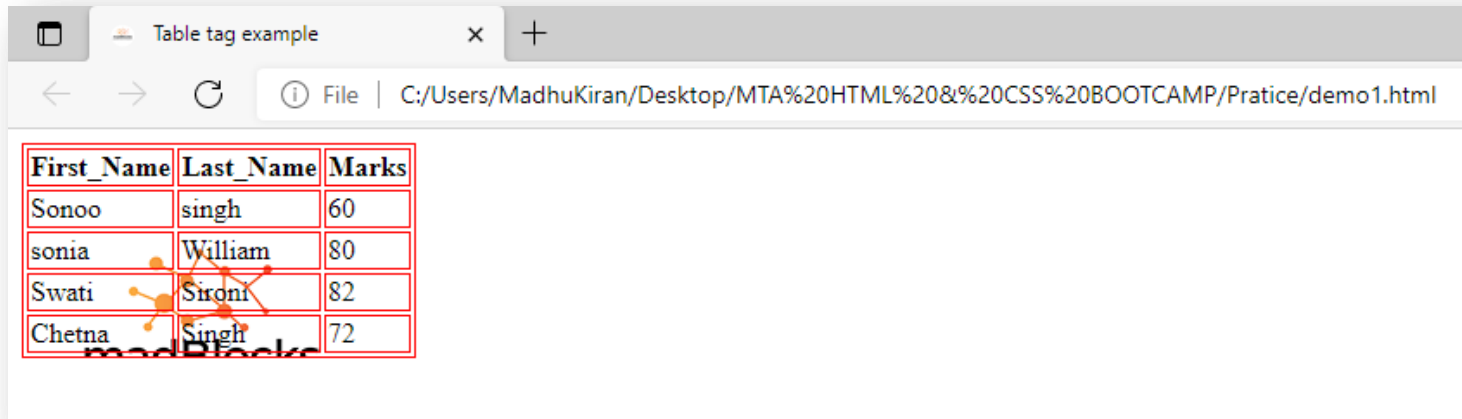
HTML <table> Tag Attributes

Table Bacgrounds Attributes:
Let us make the changes as shown in the snippet

background Snippet output: This will produce the following result. Here background image did not apply to table's header.

HTML <table> Tag Attributes

Table Height and width:

You can set a table width and height using **width** and **height** attributes.

You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

Syntax:

<table border = "1" width = "400" height = "150">

Let us modify the example and the above syntax to the snippet.

HTML <table> Tag Attributes

Table Height and width Attributes:
Let us make the changes as shown in the snippet

Height and width Snippet: Let us add height and width to the table

```
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>

</head>
<body>
<table border="1" width="500" height="500">
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>singh</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
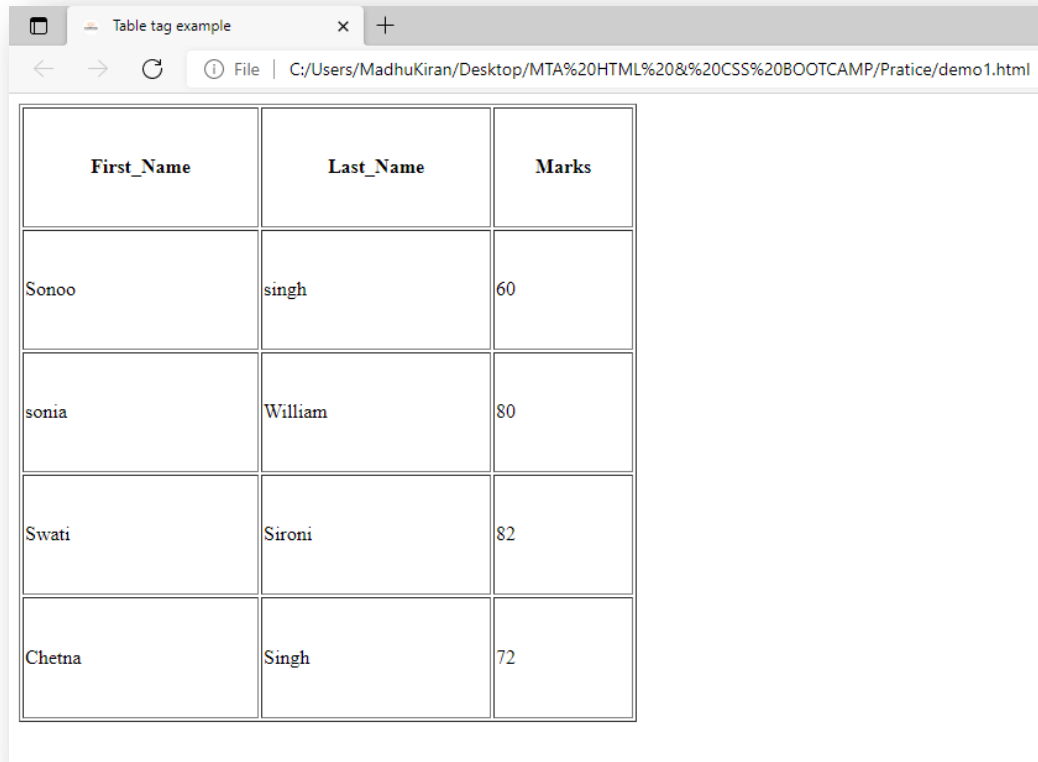
HTML <table> Tag Attributes

Table Height and width Attributes:
Let us make the changes as shown in the snippet

Height and width Snippet output:

First_Name	Last_Name	Marks
Sonoo	singh	60
sonia	William	80
Swati	Sironi	82
Chetna	Singh	72

HTML <table> Tag Attributes

Table Caption:

The **caption** tag will serve as a title or explanation for the table and it shows up at the top of the table.

Syntax:

<caption>This is the caption</caption>

Let us modify the example and the above syntax to the snippet in Table tag before the <th> tag.

HTML <table> Tag Attributes

Table Caption:

Let us make the changes as shown in the snippet

Caption Snippet: Let us add caption tag to the table

```html
<!DOCTYPE html>
<html>
<head>
  <title>Table tag example</title>
  </head>
<body>
<table border="1">
<caption>This is the caption</caption>
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>singh</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</table>
</body>
</html>
```
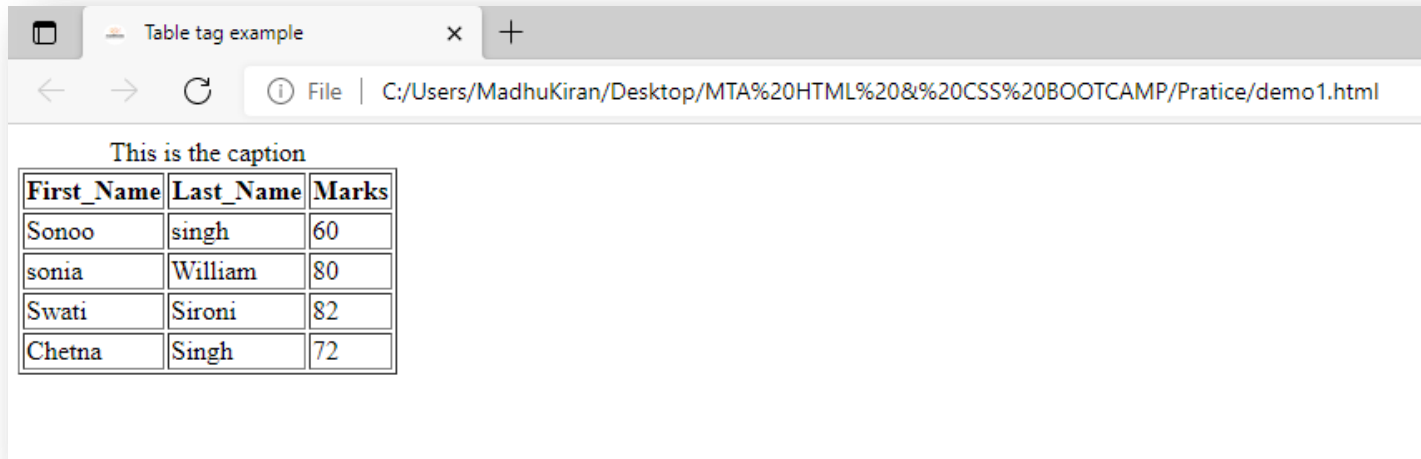
HTML <table> Tag Attributes

Table Caption:

Let us make the changes as shown in the snippet

Caption Snippet Output:

HTML <table> Tag Attributes

Table Header, Body and footer:

Tables can be divided into three portions − a header, a body, and a foot.
The head and foot are rather similar to headers and footers in a word-processed document that remain the same for every page, while the body is the main content holder of the table.

The three elements for separating the head, body, and foot of a table are −
- ❏ **<thead>** − to create a separate table header.
- ❏ **<tbody>** − to indicate the main body of the table.
- ❏ **<tfoot>** − to create a separate table footer.

A table may contain several <tbody> elements to indicate *different pages* or groups of data. But it is notable that <thead> and <tfoot> tags should appear before <tbody>

Syntax:

> **<thead>contents….</thead>**
> **<tbody>contents….</tbody>**
> **<tfoot>contents……</tfoot>**

HTML <table> Tag Attributes

Table Header, body and footer:

Let us make the changes as shown in the snippet

Head,body & footer Snippet: Let us add thead, tbody, tfoot tag as below

```
<!DOCTYPE html>
<html>
<head>
   <title>Table tag example</title>
</head>
<body>
<table border="1">
<caption>This is the caption</caption>
<thead><tr><td colspan = "4">This is the head of the table</td></tr></thead>
<tfoot><tr><td colspan = "4">This is the foot of the table</td></tr></tfoot>
<tbody>
<tr><th>First_Name</th><th>Last_Name</th><th>Marks</th></tr>
<tr><td>Sonoo</td><td>singh</td><td>60</td></tr>
<tr><td>sonia</td><td>William</td><td>80</td></tr>
<tr><td>Swati</td><td>Sironi</td><td>82</td></tr>
<tr><td>Chetna</td><td>Singh</td><td>72</td></tr>
</tbody>
</table>
</body>
</html>
```
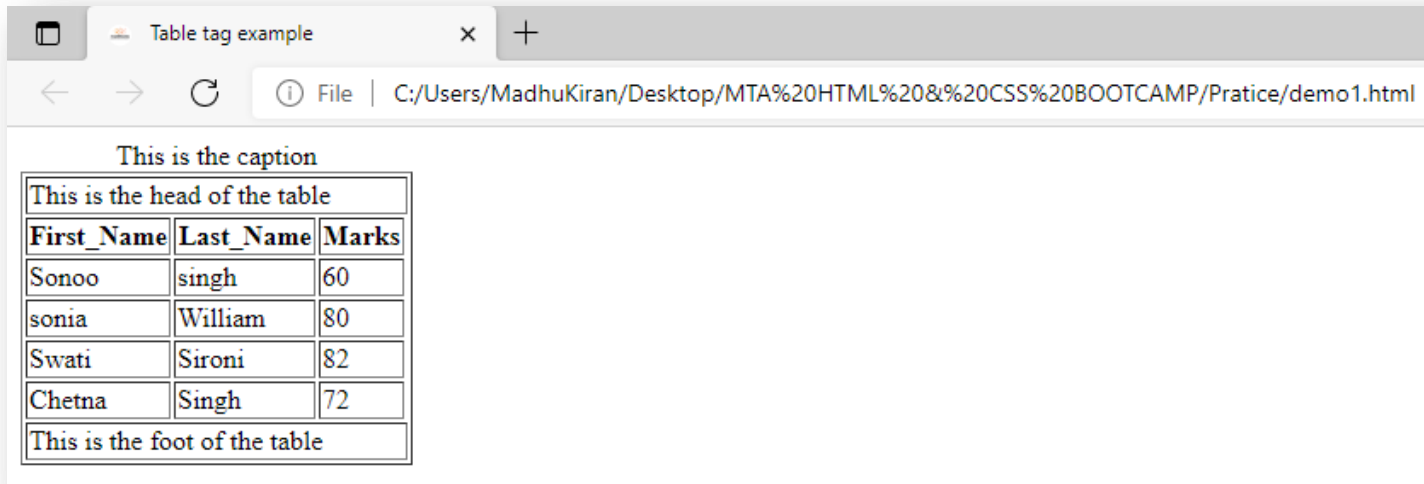
HTML \<table\> Tag Attributes

Table Header, body and footer:

Let us make the changes as shown in the snippet

Head,body & footer Snippet output: