Front End Technologies - Day 3

Agenda

- **Image formatting**
- **Audio formatting**
- **Video formatting**
- **Tables**

Image formatting

The HTML **<img>** tag is used to embed an image in a web page.

Images are not technically inserted into a web page; images are linked to web pages. The **<img>** tag creates a holding space for the referenced image.
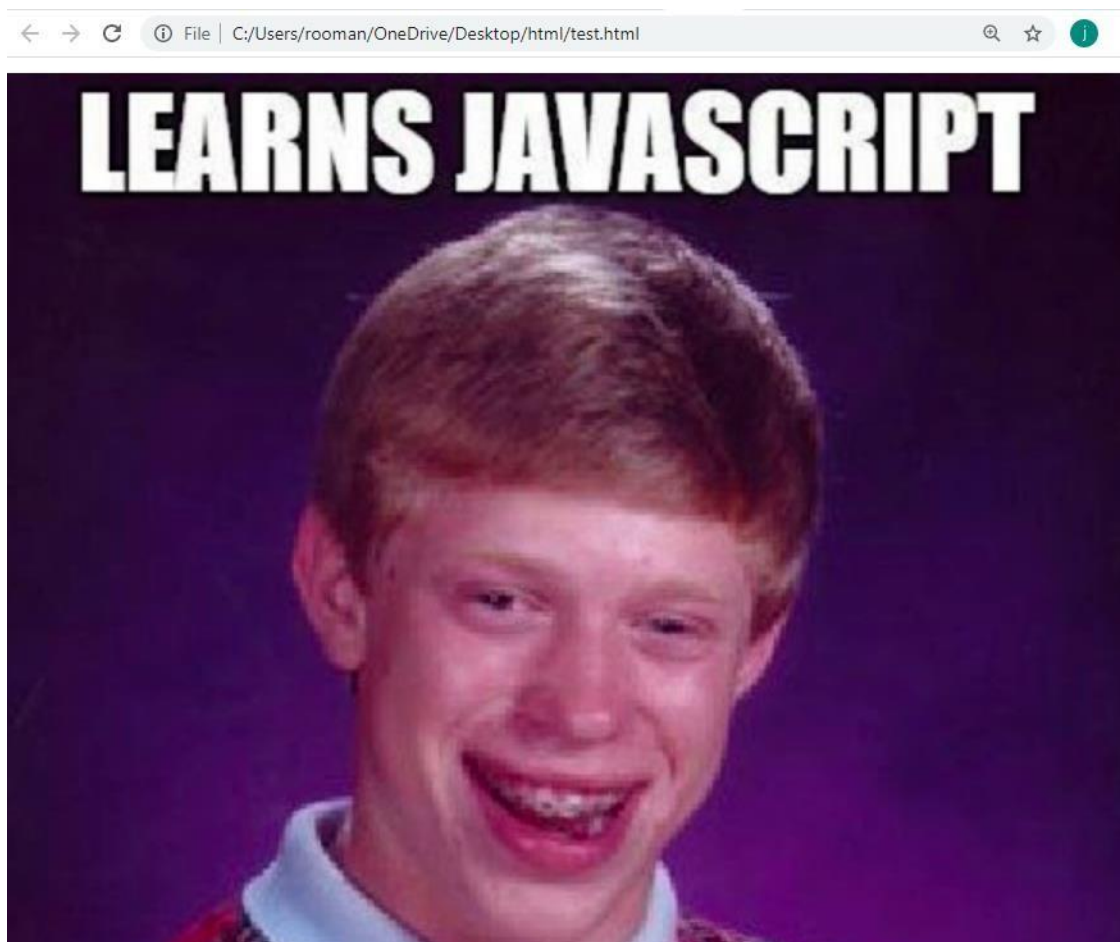
The **<img>** tag is empty; it contains attributes only, and does not have a closing tag such tags are called as **self-closing tags**. Let us consider following images and see how to embed them into our website
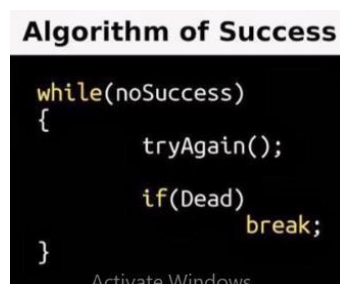
Let's go ahead with the first image

Output:


<img> - Defines an image.

Based on the size of the image it will occupy the space on your web page. But this is not the ideal way of inserting data to your page, we need to specify dimensions. Let us see how to add dimensions, in that region the image should be placed.

```
C:\Users\rooman\OneDrive\Desktop\html\test.html - Sublime Text (UNREGISTERED)    —    □    ×
File   Edit   Selection   Find   View   Goto   Tools   Project   Preferences   Help
   test.html          ×
1   <img src="1.jpeg" height="100" width="200">
```

Output:

C   ⓘ File | C:/Users/rooman/OneDrive/Desktop/html/test.html
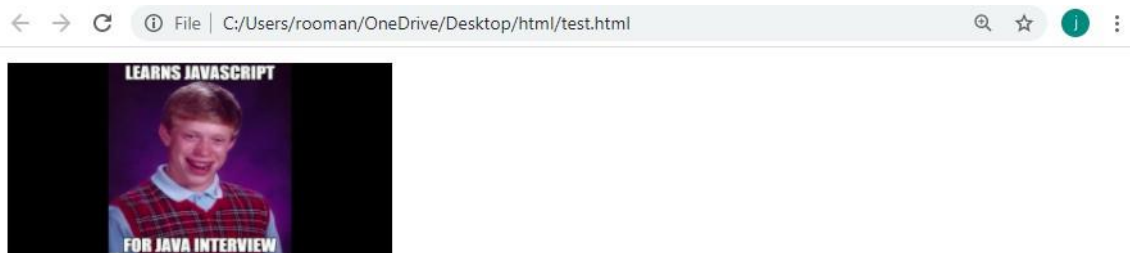
Now we can see the image data is in the size we wanted it to be. **By mentioning proper tag attributes we can present the data in organised way.**

As you might have observed we did not give the ending tag. If you are wondering what will happen if we give an ending tag, then let us consider that as well and see the output
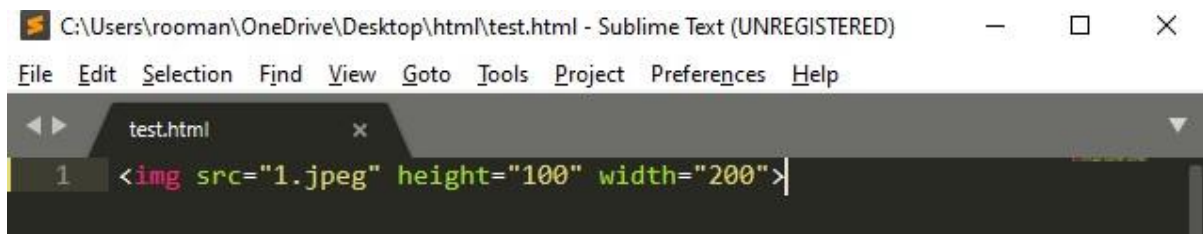
```
C:\Users\rooman\OneDrive\Desktop\html\test.html - Sublime Text (UNREGISTERED)    —    □    ×
File   Edit   Selection   Find   View   Goto   Tools   Project   Preferences   Help
   test.html          ×
1   <img src="1.jpeg" height="100" width="200">Programmer</img>
```

Output:

C   ⓘ File | C:/Users/rooman/OneDrive/Desktop/html/test.html
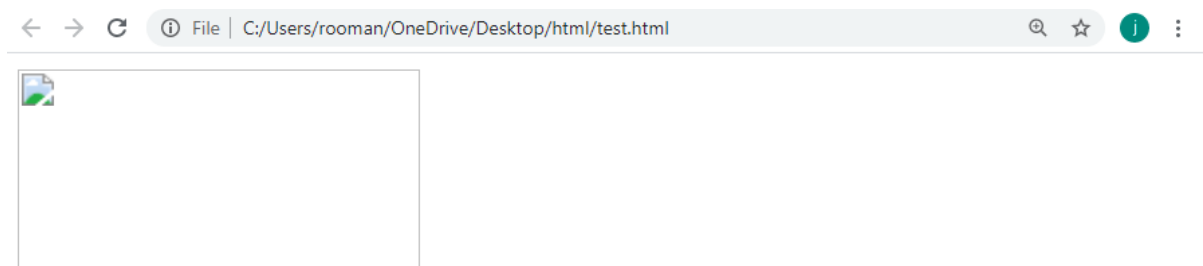

Programmer

We can see whatever message we enter will be displayed. But certainly there are better ways to give proper name and message to the image, which we shall be seeing in the future days.

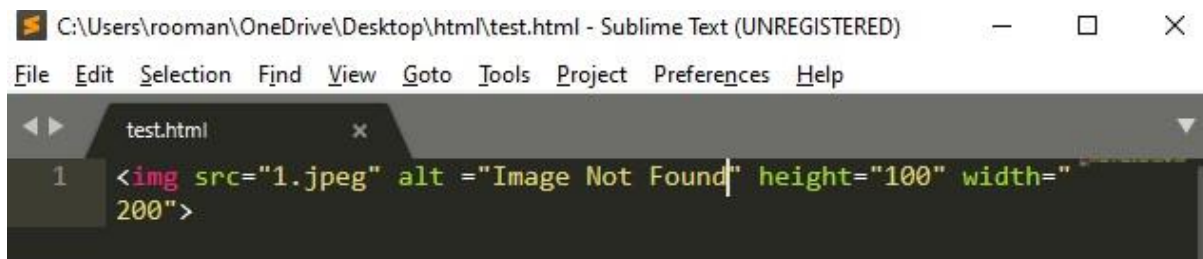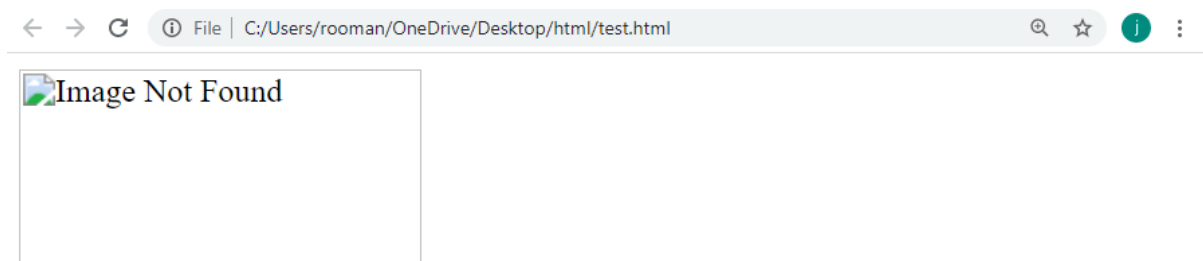**Example:** What if there is no image inside the path/folder?

Output:

As we can see we are getting a broken image, indicating image is not found. It would be more appropriate if relevant message was displayed along with it.

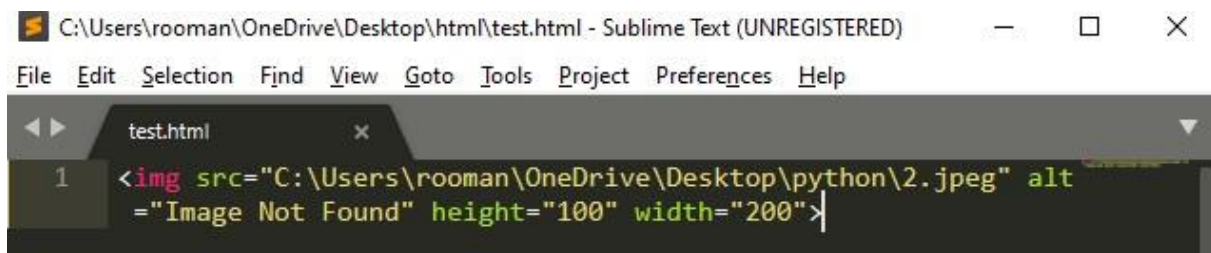**Example:** Display the relevant message if image is not found.
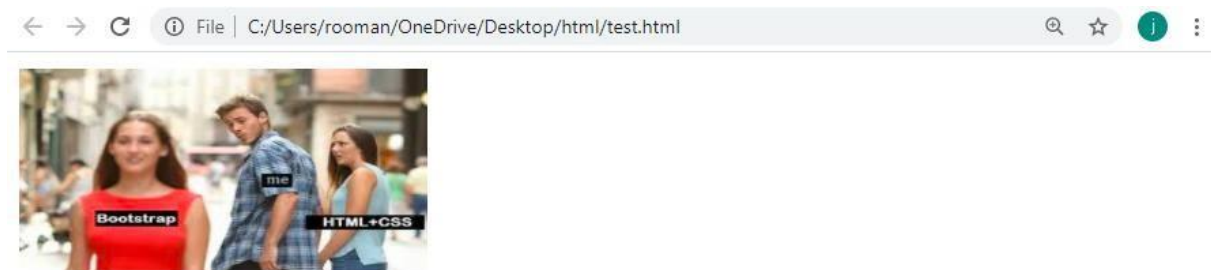

Output:

Great!! So including another tag attribute we can display the appropriate message.
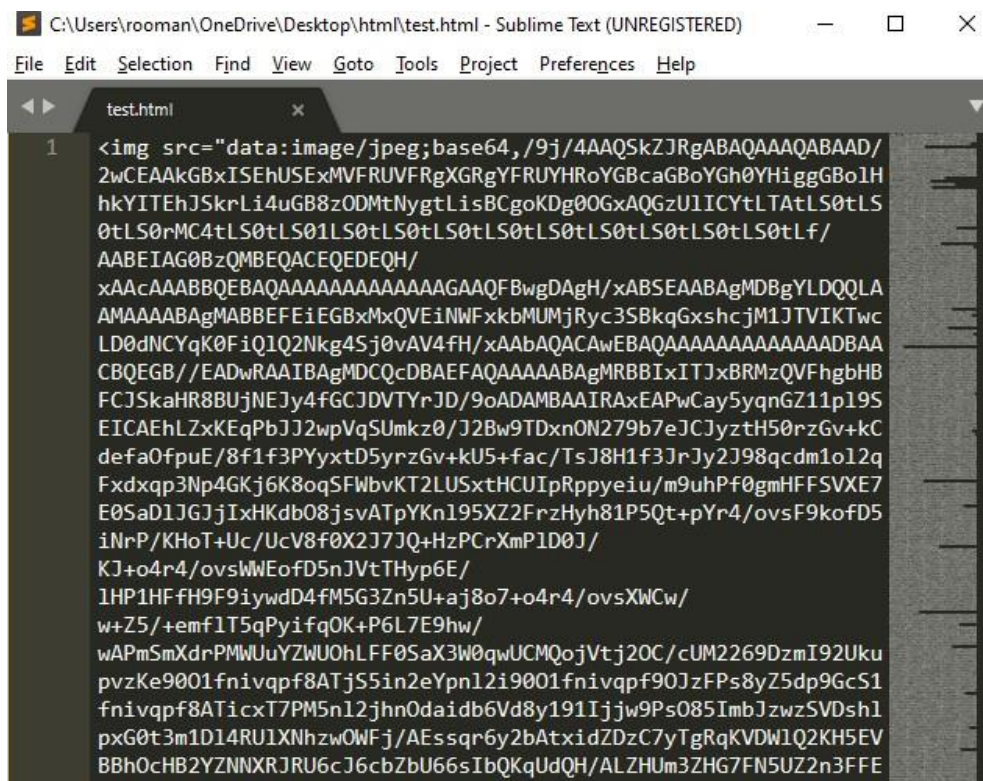
Example: Consider your image is not in the same folder as your HTML file.
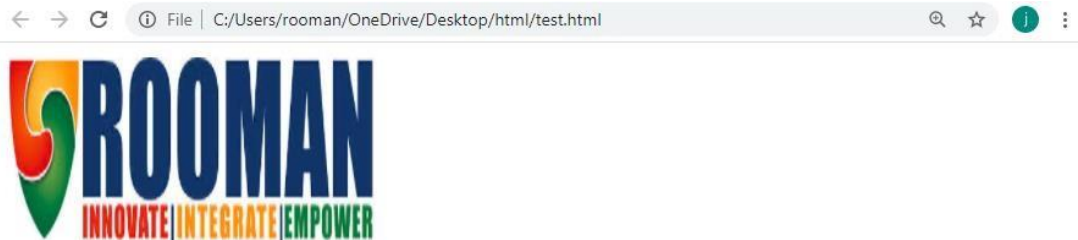

Output:

Example: Take an image from the website and display it accordingly.

We just have to copy the link address and paste it in the source tag attribute.

Output:

Audio formatting

Now let us move on to next form of data i.e. audio data. <mark>**We have different format like mp3, ogg, wav and for these formats html has also specified certain type like audio/mpeg, audio/ogg,audio/wav respectively**</mark>. Let us see how to use this and get the audio on web page
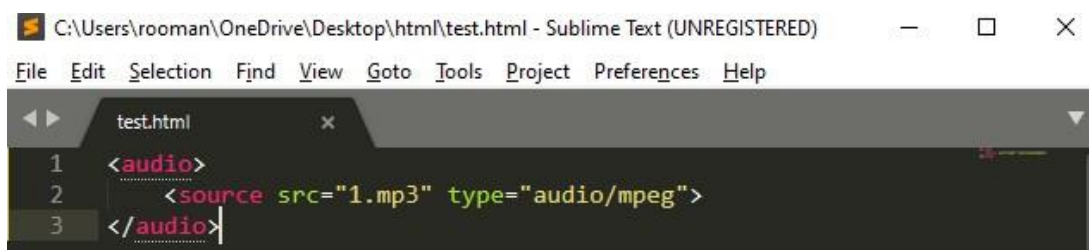
<audio> - Defines embedded sound content

<source> - Defines multiple media resources for media elements (<video> and <audio>)

Output:

We can see nothing is been displayed. **It is because we haven't given any controls i.e. play/pause, volume control** etc to the file. So let us add those fields through tag attributes

```
C:\Users\rooman\OneDrive\Desktop\html\test.html - Sublime Text (UNREGISTERED)    —    □    ✕
File  Edit  Selection  Find  View  Goto  Tools  Project  Preferences  Help
test.html                    ✕
1    <audio controls>
2        <source src="1.mp3" type="audio/mpeg">
3    </audio>
```
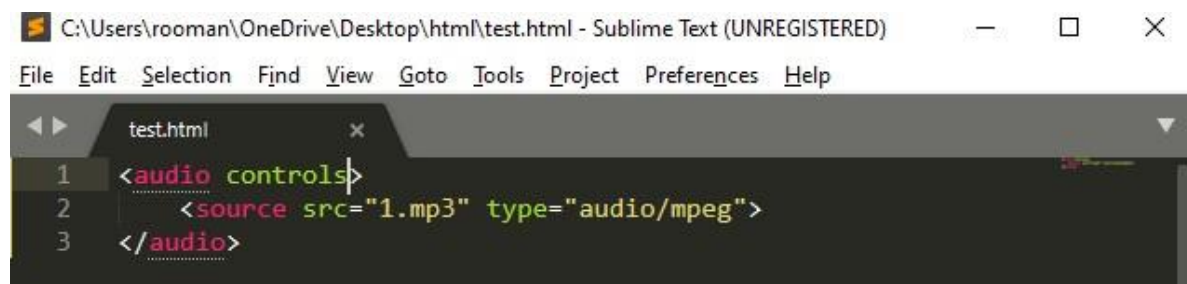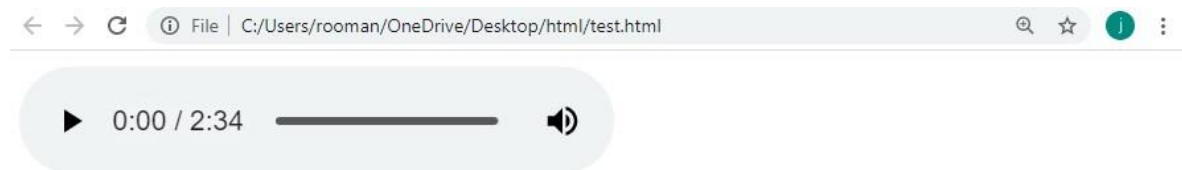
Output:

```
←  →  C    ⓘ File | C:/Users/rooman/OneDrive/Desktop/html/test.html        ⊕  ☆  j  ⋮
```
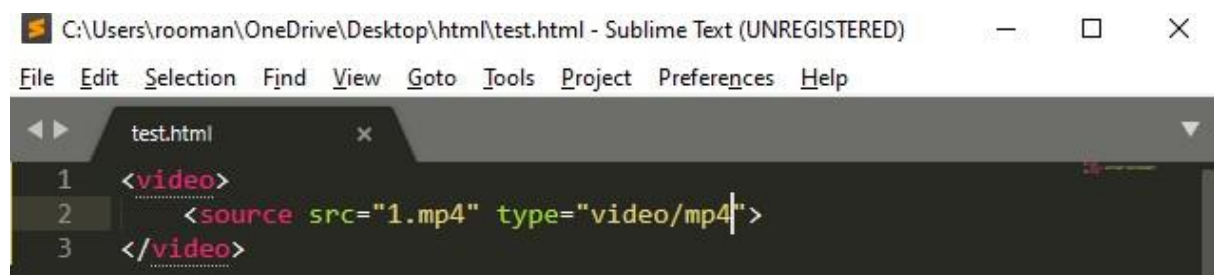
```
▶  0:00 / 2:34  ━━━━━━━━━━━━━━━━  ◀))
```

Great! So now we have the control over the audio file. We can play/pause; change the volume as per expectation.

Video formatting

Now that we know how to handle image type data and audio data, let us move on with video type of data and see which relevant tags to be used. <mark>In video we have formats as mp4, webm, ogg and its associated type video/mp4, video/webm, video/ogg respectively.</mark>

```
C:\Users\rooman\OneDrive\Desktop\html\test.html - Sublime Text (UNREGISTERED)    —    □    ✕
File  Edit  Selection  Find  View  Goto  Tools  Project  Preferences  Help
test.html                    ✕
1    <video>
2        <source src="1.mp4" type="video/mp4">
3    </video>
```

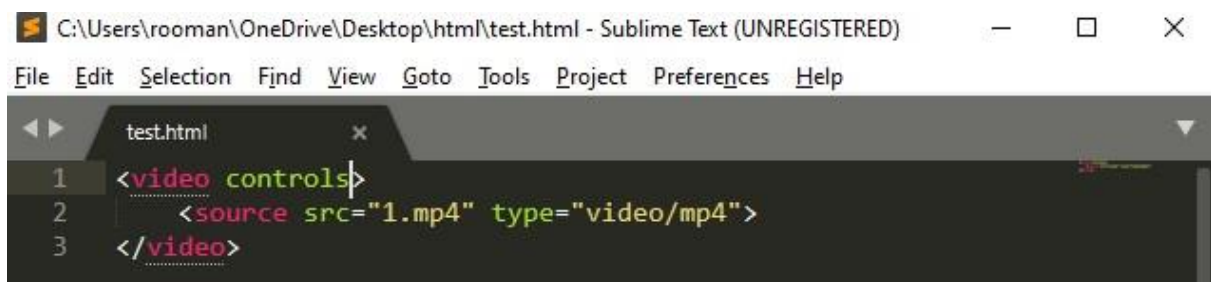**<video> -** Defines embedded video content

<source> - Defines multiple media resources for media elements (<video> and <audio>)

Output:

But again as we can see, there are no play/pause or volume controls. So let us add the tag attribute to get the controls.
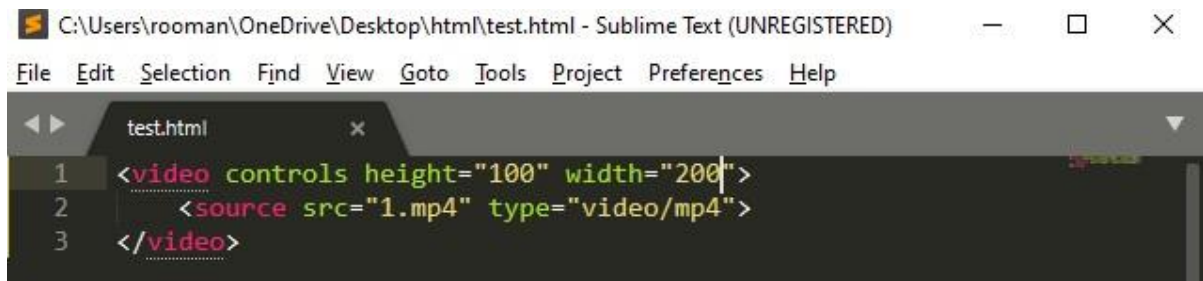
Output:

Now as we can see, we have controls of play/pause, volume, and also the screen size and many more.

Example: Place the video in a certain region by mentioning the dimensions.

Just like we had given dimensions for the image type of data, we can also give dimensions for video type data.

Output:
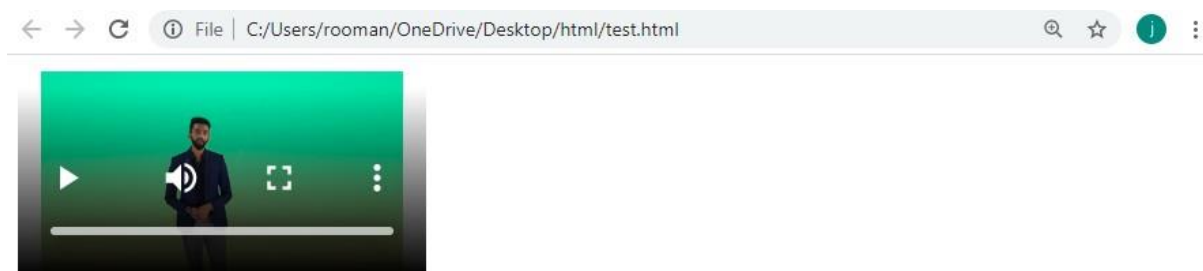
Tables

Now let us see the next type of data which is used majority of the times to represent the data in a certain tabular format.

Let us consider the following table

Name	Language	Year
James	Java	1991
Guido	Python	1989
Dennis	C	1972

Let us see the tags we'll be using to represent the data in tabular format
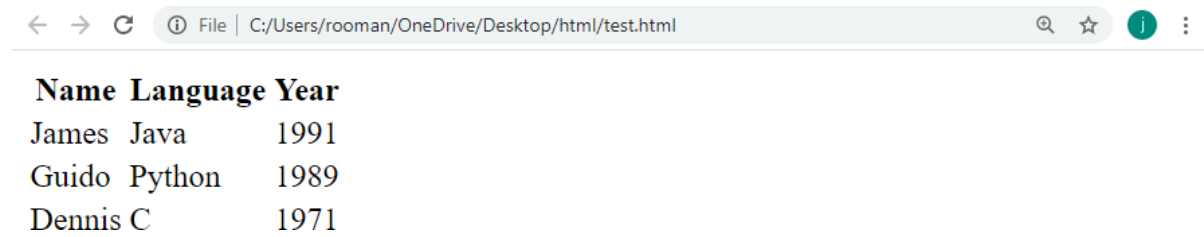
<table> tag → **<table>**

<table-row> tag → **<tr>**

<table-header> tag → **<th>**

<table-data> tag → **<td>**

> **<table> -** Defines a table
>
> **<tr> -** Defines a row in the table
>
> **<th>** - Defines a header cell in the table
>
> **<td> -** Defines a cell in the table

```
C:\Users\rooman\OneDrive\Desktop\html\test.html - Sublime Text (UNREGISTERED)        —    ☐    ✕
File  Edit  Selection  Find  View  Goto  Tools  Project  Preferences  Help

   test.html              ✕
 1    <table>
 2        <tr>
 3            <th>Name</th>
 4            <th>Language</th>
 5            <th>Year</th>
 6        </tr>
 7
 8        <tr>
 9            <td>James</td>
10            <td>Java</td>
11            <td>1991</td>
12        </tr>
13
14        <tr>
15            <td>Guido</td>
16            <td>Python</td>
17            <td>1989</td>
18        </tr>
19
20        <tr>
21            <td>Dennis</td>
22            <td>C</td>
23            <td>1971</td>
24        </tr>
25    </table>
```

Output:

C:/Users/rooman/OneDrive/Desktop/html/test.html

Name	Language	Year
James	Java	1991
Guido	Python	1989
Dennis	C	1971

Successfully we have been able to create the table. But if you were expecting boundary and styling to be done then you'll have to wait until we start with CSS.