THE HTML MASTER GUIDE

"An eye opening guidethat will turn you you into an Html guru"

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INTRODUCTION

What is HTML?

HTML is a **markup** language for **describing** web pages.HTML stands for Hyper Text Markup Language. A markup language is a set of markup tags
HTML tags describe HTML documents. Each HTML tag describes different document content. There are a number of markup languages like XML, XHTML, and MARKDOWN however, in this book, I will pass you through html strictly.

In this guide, you will find all the html tags you will ever need to know and get to know how they are used with the help of well-illustrated examples.

HTML editors

To write a web document, just like any other documents we will need an HTML editor. There are a number of them some being free and others will cost you some little money.

You can use professional HTML editors to write HTML like:

- Microsoft Web Matrix
- Sublime Text
- VS code

However, for learning HTML I recommend a text editor like Notepad or Text Edit for those using Mac. I believe using a simple text editor is a good way to learn HTML.

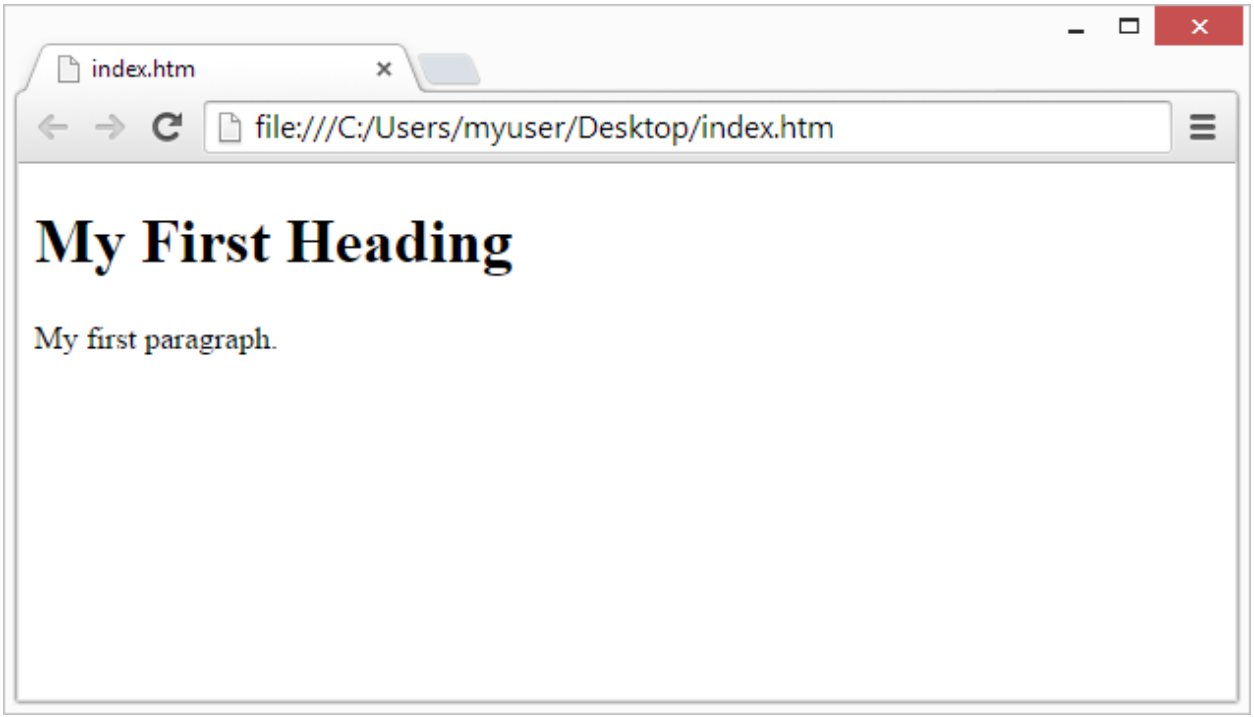
LET US WRITE A SIMPLE HTML CODE. RIGHT?

- Open the text editor of your choice and write the following snippet of code.
- Save the document as index with file extension ".html" or ".htm".
- Open the saved document with a web browser like chrome (preferably) or any other like opera mini and view it from there.

Do not worry if this example uses tags you have not learned. You will learn about them in the next chapters

```
<! DOCTYPE html>
<html>
<body>

<h1>my first Heading</h1>

<p>my first paragraph. </p>

</body>
</html>
```

When you view this in the browser, you will see your first web page.



All HTML documents must start with a type declaration: **<! DOCTYPE html>**.The HTML document itself begins with **<html>** and ends with **</html>**.The visible part of the HTML document is between **<body>** and **</body>**.This has been seen in the first example.

The <!DOCTYPE> declaration helps the browser to display a web page correctly. To display a document correctly, the browser must know both type and version of HTML used. The doctype declaration is not case sensitive. All cases are acceptable.

Some of the html declarations include the below;

HTML5

```
<!DOCTYPE html>
```

HTML 4.01

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

HTML elements

HTML elements have a **start** tag and an **end** tag, with the **content** in between.

```
<tag name>content</tag name>
```

Therefore, an **element** is everything from the start tag to the end tag. In addition, you need to know that HTML elements can be nested (elements can contain elements). All HTML documents consist of nested HTML elements.

Take the example that contains four HTML elements:

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph.</p>

</body>
</html>
```

The **<html>** element defines the whole document. It has a **start** tag <html> and an **end** tag </html>. Another HTML element in the above code snippet is the <body> element. The **<body>** element defines the **document body** having a **start** tag <body> and an **end** tag </body>. Within The element **<body>** is two other HTML elements (<h1> and <p>) .these are called nested elements as they are contained in the parent **<body>** element.

TIPS:

- DO NOT EVER FORGET THE END TAG. IT MAY PRODUCE UNEXPECTED RESULTS.
- HTML TAGS ARE NOT CASE SENSITIVE; IT IS ADVISABLE TO USE LOWER CASES FOR STRICTER DOCUMENTS LIKE XHTML.

SOURCE: www.w3schools.com/www.w3schools.com/html/html_elements.html

That is all about the HTML basics.in the next chapter, we will look at the different html tags.

BASIC HTML TAGS

<!DOCTYPE html>

The <! DOCTYPE> declaration must be the very first thing in your HTML document before the <html> tag. However it is not an HTML tag, it is an instruction to the web browser about what version of HTML the page is wrote in.

```
<!DOCTYPE html>
```

<html>

The <html> tag tells the browser that this is an HTML document.it represents the root of an HTML document and contains all other html tags.it starts with **start tag <html>** and an **end tag </html>**.

```
<html></html>
```

<head>

The <head> contains meta data, title or name of the web pages it also includes webpage dependencies, links etc.it starts with **start tag <head>** and an **end tag </head>**.all info in the head tag is not divisible in the browser

```
<head></head>
```

<body>

The <body> tag defines the document's body content. The <body> element contains all the contents of an HTML document, such as text, videos, images, tables, lists, etc. It starts with **start tag <body>** and an **end tag </body>**.

```
<body></body>
```

<h1> to <h6>

The <h1> to <h6> tags are used to define HTML headings. These are six variations in writing headings. The <h1> defining the most important heading with the largest font and the <h6> defining the least important heading with the smallest heading.

```
<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>
```


This is the paragraph tag.it starts with ** ** and ends with ** **.Every text put between the tags is a paragraph in html.

```
<p>This is some text in a paragraph.</p>
```


It indicates a line break in a web page.it is used when writing a new line. This tag is considered and "*empty tag*" meaning it has no close tag.

```
this is the first line  <br> and this is a  new line
```

<hr>

This is a horizontal rule tag.it draws a horizontal line break at the end of the section thus defining a thematic break in a web document.it can be used in case of change of topic on the same web page.

```
<p>the first section ends here ....</p>

<hr>

<p>Beginning  of second section.....</p>
```

<!—-"comment"-->

This is the comment tag. The comment tag is used to insert comments in the source code. Comments are not displayed in the browsers. Comments explain your code.this can help you when you edit the source code at a later date. This is especially handy if you have a lot of code.

```
<!--This is a comment. Comments are not displayed in the browser-->

<p>Hello there.</p>
```


This divides the webpage's content into different blocks for easy structuring of the web. Like the other tags, it has a closing tag too.

```
<div>
  <h3>This is a heading</h3>
  <p>This is a paragraph.</p>
</div>
```


This is injects inline objects like videos and images without styling the page.it groups inline objects together and provides no visual change.it is also helpful when using CSS to style independent objects in a document.

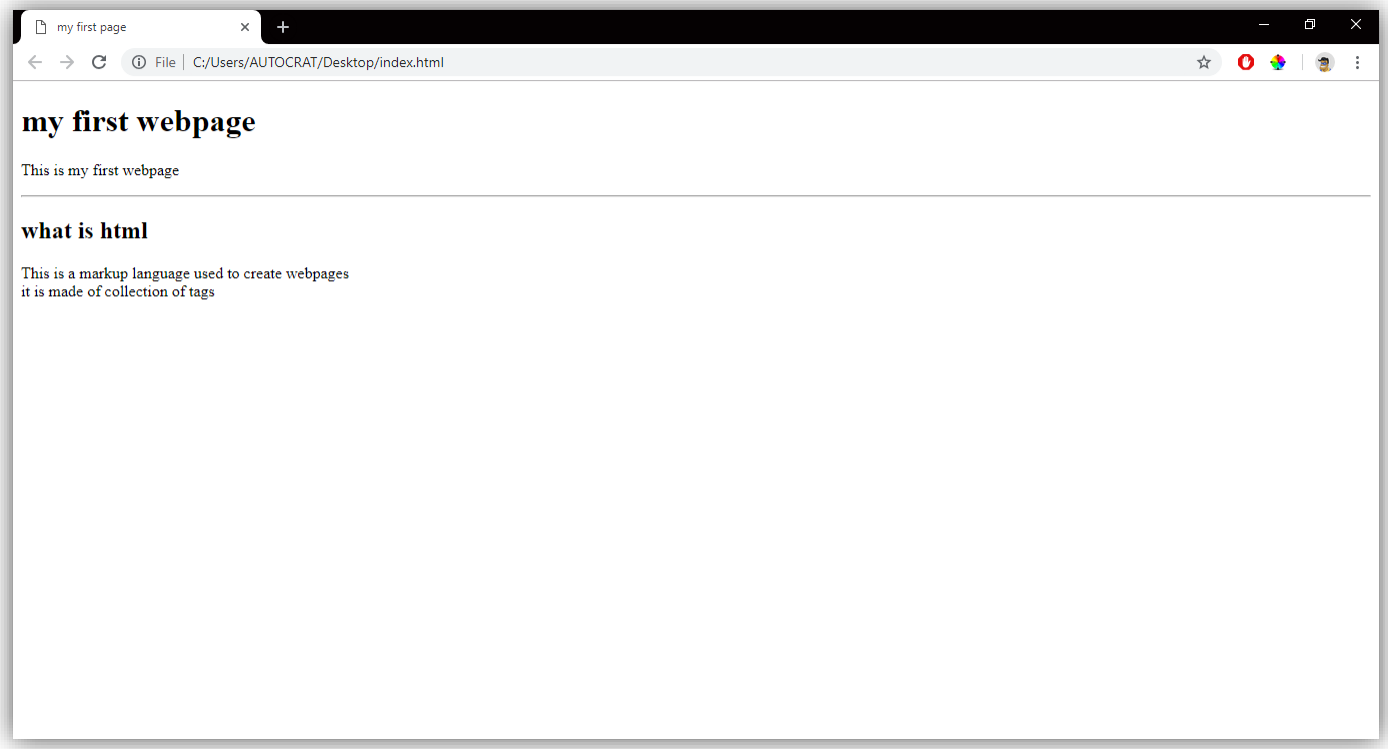
```
<p>My mother has <span>blue</span> eyes.</p>
```

RECAP:

Let us have an example covering all what we have seen in the basic HTML tags.

- Open your html editor of your choice (notepad, notepad++, vs. code, sublime text etc.)
- Create a new file and name it any name of your choice like "index.html"
- Then write in the code below (do not copy and paste, code is learnt by writing)
- Open the file in your browser.

```html
<!DOCTYPE html>
<html>
<head>
<title>my first page</title>
</head>
<body>
<!-—This is the main title-->

<h1>my first webpage</h1>
<p>This is my first webpage</p>
<hr>
<h2>what is html </h2>
<p>This is a markup language used to create webpages<br> it is made of
collection of tags</p>


</body>
</html>
```



FORMATTING TAGS

This tag is used to make the text bold. However, you can also use <b> tag to make text bold.

```
<strong>Strong text</strong>
<b>Strong text</b>
```


This tag is used to emphasize text in the document.it displays text in *"italic".*

```
<em>Emphasized text</em>
```

<i>

This tag as the above displays text in italic format. The difference is that the is used to emphasizing text.

```
<p>He named his car <i>The lightning</i>, because it was very fast.</p>
```

<strike>

This tag is used to draw a line at the center of the text.it is similar to the ~~*"strike through*~~ "used in Microsoft word.

```
<p>Version 2.0 is <strike>not yet available!</strike> now available!</p>
```

<cite>

This tag is used to cite the works tittle, the author etc.

```
<p><cite>The Scream</cite> by Edward Munch. Painted in 1893.</p>
```

<del> and <ins>

The <del> tag defines text that has been deleted from a document. Whereas the <ins> defines text which has been added in a document.

```
<p>My favorite color is <del>blue</del> <ins>red</ins>!</p>
```

<blockquote>

The <blockquote> tag specifies a section that is quotations from another source in HTML. It is for quoting quotes that go beyond one line. You can use <q> to quote inline quotes (which do not go to the next line).

```
<blockquote>
For 50 years, WWF has been protecting the future of nature. The world's
leading conservation organization, WWF works in 100 countries and is supported
by 1.2 million members in the United States and close to 5 million globally.
</blockquote>
```

<abbr title=" ">

The <abbr> is for abbreviations and their full forms that are placed in the “title” attribute. An attribute provides additional information about HTML elements.

```
The <abbr title="United Kingdom">UK</abbr>  has countries like Britain,
Scotland and wales
```

<address>

The <address> tag specifies contact details about the web page.it is usually on the bottom in the footer.

```
<address>
Visit us at:strret234<br>
Contact: 00000000000<br>
web:@@@@@@.com<br>
USA
</address>
```

<dfn>

The <dfn> tag is for definitions in a document.

```
<p><dfn>HTML</dfn> is the standard markup language for creating web pages.</p>
```

<code>

This tag is for displaying code snippets in your document. With proper CSS you can create a beautiful display of code in your document.

```
<code>This is some piece of code </code>
```

<sub> AND <sup>

The <sub> creates small text below a text known as subscript like "**H_2O".**That 2 is a subscript in the equation of water. In addition, the <sup> creates a text slightly above the text but relatively smaller to it called a superscript. Like this quadratic equation **"x2 + 2x -1 = 0",** that 2 above "x" is a superscript.

```
<p>This is a <sub>subscript</sub> text.</p>
<p>This is a <sup>superscript</sup> text.</p>
```

<small>

This simply makes the text smaller in size. Most people use it to refer to invalid info or redundant info.

```
<p>this is  <small>invalid text</small> ignore it</p>
```

<pre>

You may wonder how hectic it would be writing a single html page of an article of 5oo words at least. Well, this tag allows you put in your already formatted text with all its spaces and other formatting without using <br>, <i>, <small> etc. as you can just transfer your word document into this tags.

```
<pre>
Text in a pre-element
is displayed in a fixed-width
font, and it preserves
both      spaces and
line breaks
</pre>
```

<wbr>

The <wbr> (Word Break Opportunity) tag specifies where in a text it would be ok to add a line-break, it is a new tag in HTML5. When_you are afraid that the browser will break your long lines at the wrong place, you can use the <wbr> element to add word break opportunities.

```
<p>
learning HTML has never been easier than ever. With the variety of
<wbr>Online<wbr> Resources you can easily learn at your own pace.
</p>
```

<u>

This underlines text in a document.

```
<p>This is  <u>underlined</u>.</p>
```

<time>

This is a new tag in HTML5.it is used to show time in the document.it can also be used to encode time in machine readable format with the attribute of “datetime”, this helps search engines perform a smart search.

```
<p>We close at <time>10:00</time> every night.</p>

<p>I have my birthday on <time datetime="2008-02-14 20:00">Valentine’s
day</time>.</p>
```

<s>

We use <del> and <ins> to show replaced and removed text. Whereas the <s> tag is used to show text which is no longer correct or irrelevant.

```
<p><s>My book is blue.</s></p>
<p>My new book  is red.</p>
```

<ruby>

It is used to specify ruby annotation. Ruby annotation is used to add details like pronunciation .This is mainly used in Japanese publications. The tag is used with the <rp> or with the <rt> tag. The <rt> defines an explanation of characters (East Asian typography) whereas <rp> defines what to show in browsers that do not support ruby annotations

```
<ruby>
漢 <rt> ㄏㄢˋ </rt>
</ruby>
Example got from: www.w3schools.com/www.w3schools.com/tags/tag_ruby.html
```

<progress value="" max="">

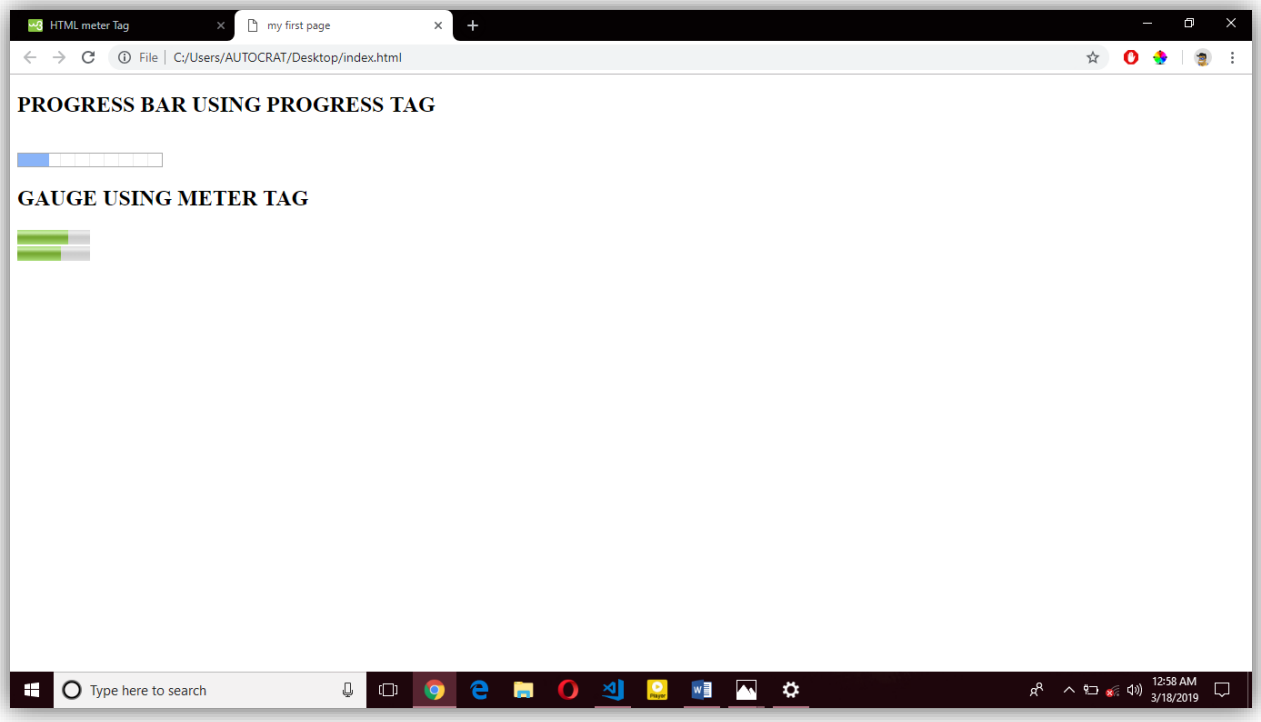
This is a more interesting tag. I will need to show you an independent example for it for the benefit of understanding more. The progress tag represents the progress of a task. However to use it well you will have to use JavaScript so as it changes as the task progresses. The "value" attribute is for the current progress and the max "attribute" is for the maximum value of progress.

```
<progress value="22" max="100"></progress>
```

<meter value="">

This is used in displaying scalar measurement like gauge disk within a known range.it should not be misused by using it to show progress as progress is displayed using the progress tag.

```
<meter value="7" min="0" max="10">7 out of 10</meter><br>
<meter value="0.6">60%</meter>
```



The above screenshot shows the perfect example of a meter tag and progress tag

<mark>

The <mark> tag defines marked text. Use when you want to highlight text.

```
<p>Do not forget to buy <mark>soda</mark> today.</p>
```

<kbd>

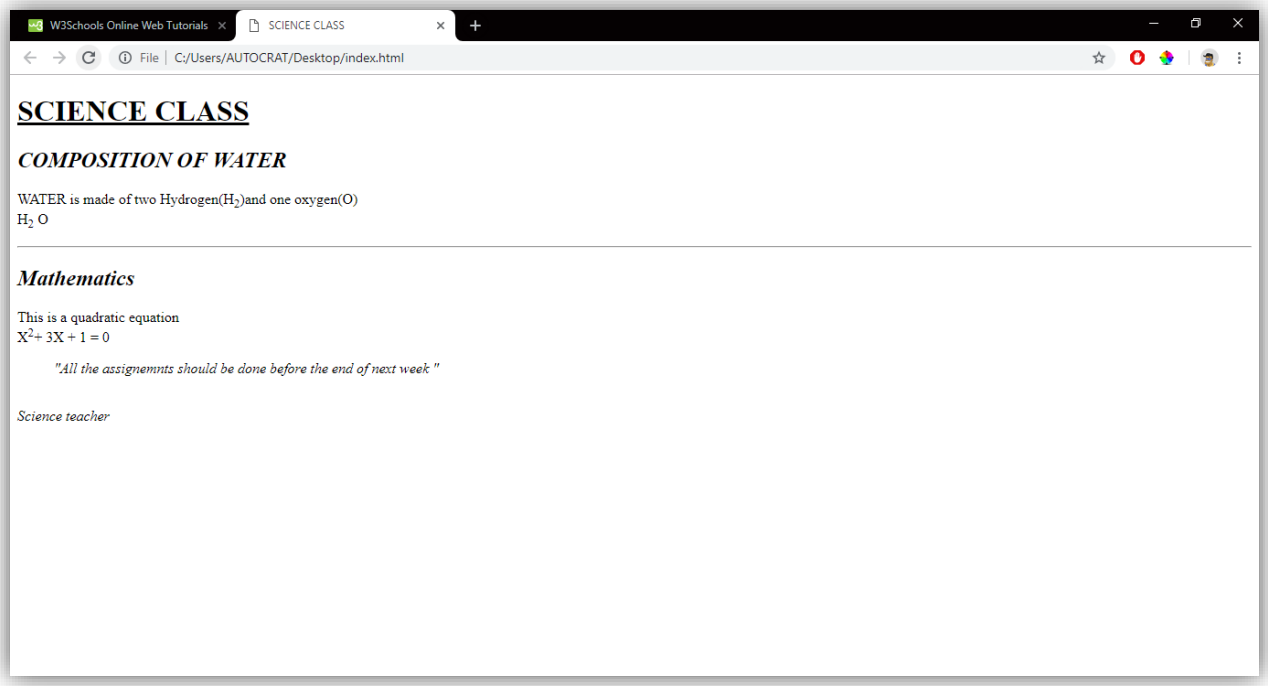
This is a phrase tag used to define keyword input.

```
<kbd>This is keyboard input</kbd>
```

RECAP:

We have seen a lot about formatting tags. let's wrap the section with this example.

```
<!DOCTYPE html>
<html>
<head>
<title>SCIENCE CLASS</title>
</head>
<body>

<u><h1>SCIENCE CLASS</h1></u>
<h2><em>COMPOSITION OF WATER</em></h2>
<p>WATER is made of two Hydrogen(H<sub>2</sub>)and one oxygen(O)<br>
H<sub>2</sub> O </p>

<hr>
<h2><i>Mathematics</i></h2>
<p>This is a quadratic equation<br> X<sup>2</sup>+ 3X + 1 = 0</p>
<blockquote>
<i>All the assignments should be done before the end of next week</i>
</blockquote><cite>Science teacher</cite>

</body>

</html>
```


W3Schools Online Web Tutorials
SCIENCE CLASS
File | C:/Users/AUTOCRAT/Desktop/index.html
SCIENCE CLASS
COMPOSITION OF WATER
WATER is made of two Hydrogen(H_2)and one oxygen(O)
H_2 O
Mathematics
This is a quadratic equation
X^2+ 3X + 1 = 0
"All the assignemnts should be done before the end of next week "
Science teacher

IFRAMES AND FRAMES

<iframe>

The <iframe> tag specifies an inline frame.it is used to embed another document within the current HTML document. For example a YouTube video, another website, etc. The src specifies the address of the document to embed in the <iframe> and the srcdoc specifies the HTML content to show in the iframe.

```
<iframe src="http://www.youtube.com"></iframe>
```

Try out the above code and see what happens(ensure to have data connection or wifi).

<img src="" alt="" height="" width="">

The <img> tag defines an image in an HTML page. The src is a required attribute that specifies the URL of the image, and the alt specifies an alternate text for the image in case the image fails to render in the browser. The height and width specify the size of the image.

> *"It is advisable to create a folder for the image. For example, if the image is "smiley.gif" and it is in the folder "images". The URL would be ./images/smiley.gif .or you can link to external images on the web with URL"*

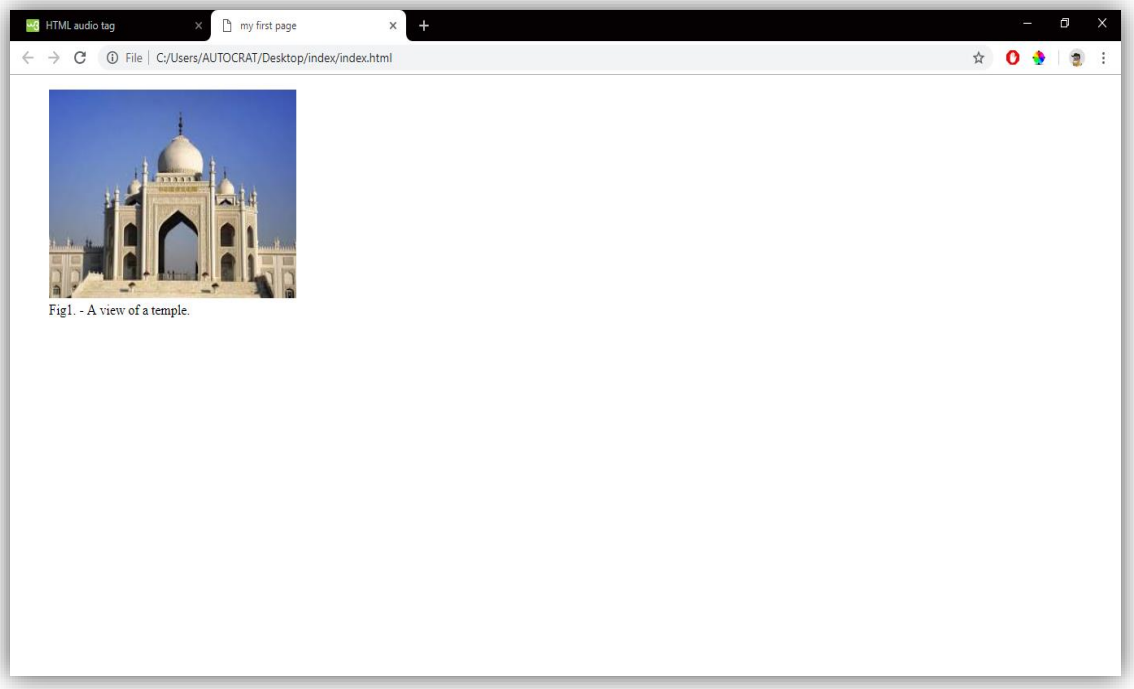
Note: Images are not technically inserted into an HTML page, they are rather linked. The <img> tag creates a holding space for the referenced image.

```
<img src="smiley.gif" alt="Smiley face" height="42" width="42">
```

<figure>

The <figure> tag specifies illustrations, diagrams, photos, code listings, etc. The <figcaption> defines a caption for a <figure> element.it can be put first or last.

```
<figure>
  <img src="temple.jpg" alt="temple" width="304" height="228">
  <figcaption>Fig1. - A view of a Temple.</figcaption>
</figure>
```



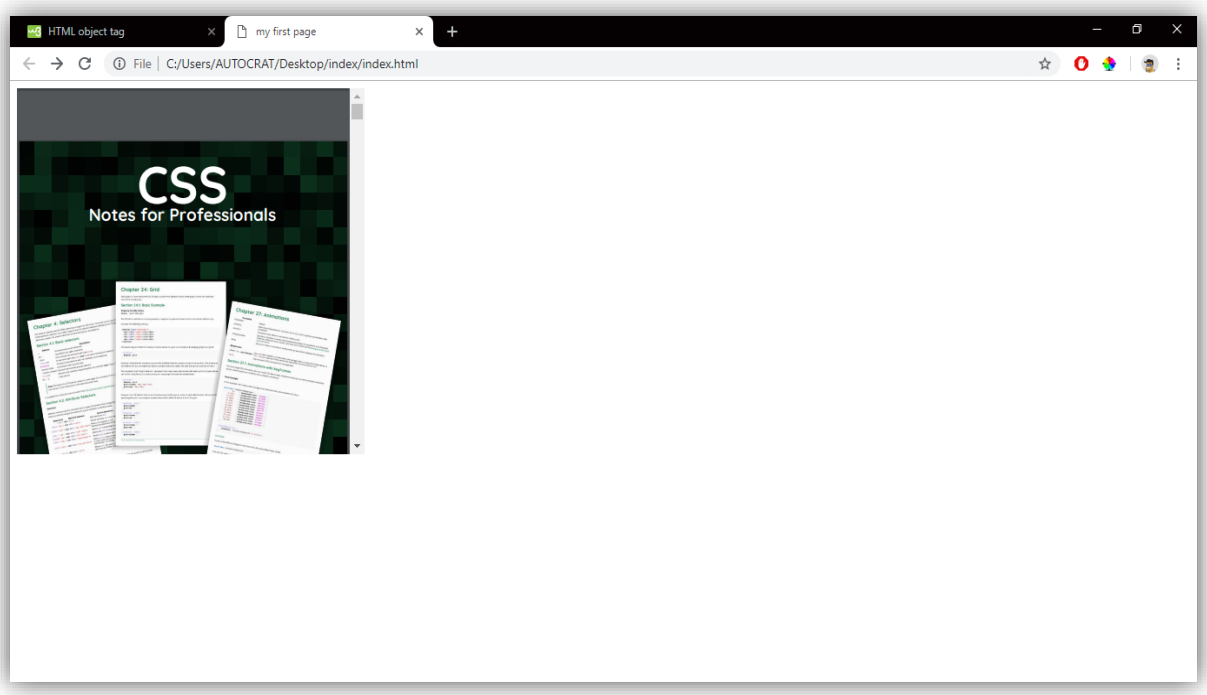
<map> AND <area>

The <map> tag is used to define a client-side image-map. An image-map is an image with clickable areas. The <map> element contains a number of <area> elements that define the clickable areas in the image map. The required name attribute of the <map> element is associated with the <img>'s "usemap" attribute and creates a relationship between the image and the map. Since it is a client-side-image-map, a good example would be seen at W3school website.
https://www.w3schools.com/www.w3schools.com/tags/tag_map.html

<object width="" height="" data="">

The <object> tag defines an embedded object within an HTML document like audio, video, Java applets, ActiveX, PDF, another web document, and Flash in your web page. The width and height describe the size of the object whereas the data specifies the location of the data to be embedded.

```
<object width="400" height="400" data="css.pdf"></object>
```



In the above, I have embedded the pdf file of CSS, which is be viewed in the browser

VIDEO AND AUDIO TAGS

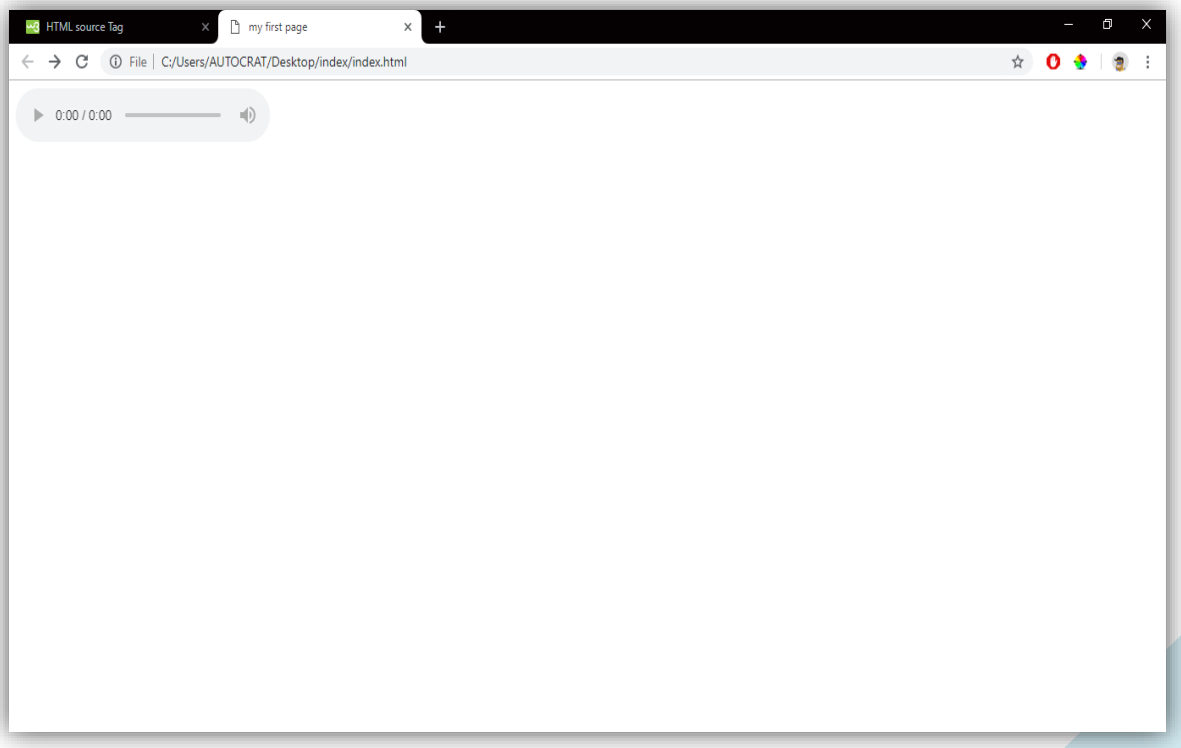
<audio controls>

The <audio> tag defines sound, such as music or other audio streams. Currently, there are 3 supported file formats for the <audio> element: MP3, Wav, and Ogg. The controls adds the media controls like the pause rewind and more.

<source>

The <source> tag is used to specify multiple media resources for media elements, such as <video> and <audio>.It allows you to specify alternative video/audio files which the browser may choose from, based on its media type or codec support. The src specifies the URL of the media file and the type specifies the media type of the file.

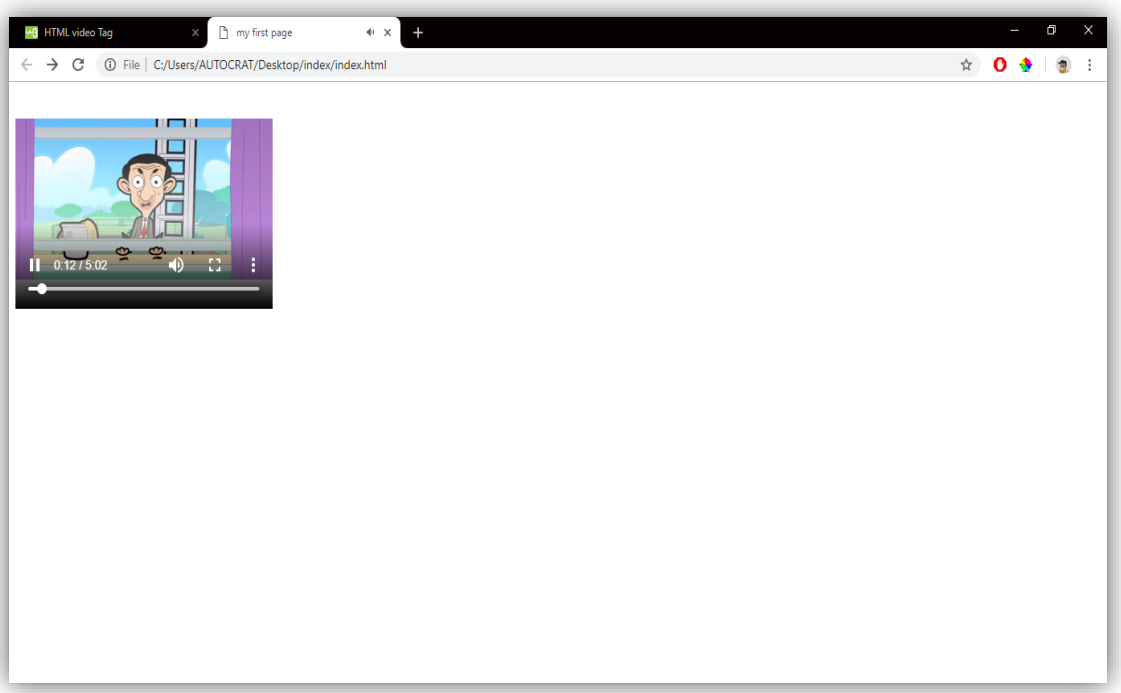
```
<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
  Your browser does not support the audio element.
</audio>
```



```
<video width="" height="" controls>
```

The <video> tag specifies video, such as a movie clip or other video streams. Currently, there are 3 supported video formats for the <video> element: MP4, WebM, and Ogg. The control specifies that the media controls should be displayed like the pause button, and the width and the height specify the size the media takes in the webpage.

```
<video width="320" height="240" controls>
  <source src="Mr. bean movie.mp4" type="video/mp4">
  <source src="Mr. bean movie.ogg" type="video/ogg">
  Your browser does not support the video tag.
</video>
```



LINKS

<a href="">

The <a> tag/anchor tag defines a hyperlink, which is used to link from one page to another. The most important attribute of the <a> element is the href attribute, which indicates the link's destination. The <a> has a number of attributes but these are the most important.

ATTRIBUTE	VALUE	DESCRIPTION
Target	_blank/_self/_parent/_top	Specifies where to open the linked document
Type	Media type	Specifies the media type linked to
Download	"file name"	Specifies that the file name will be downloaded when clicked on

<link>

The <link> tag defines a link between a document and an external resource.it is used to link external style sheets like the CSS files. It is placed in the <head> element. The "rel" means relationship, it specifies the relationship between the external document and the web page. The "href" tells where the external resource is located. Using this need pre knowledge about style sheets like CSS.

```
<head>
<link rel="stylesheet" type="text/css" href="theme.css">
</head>
```

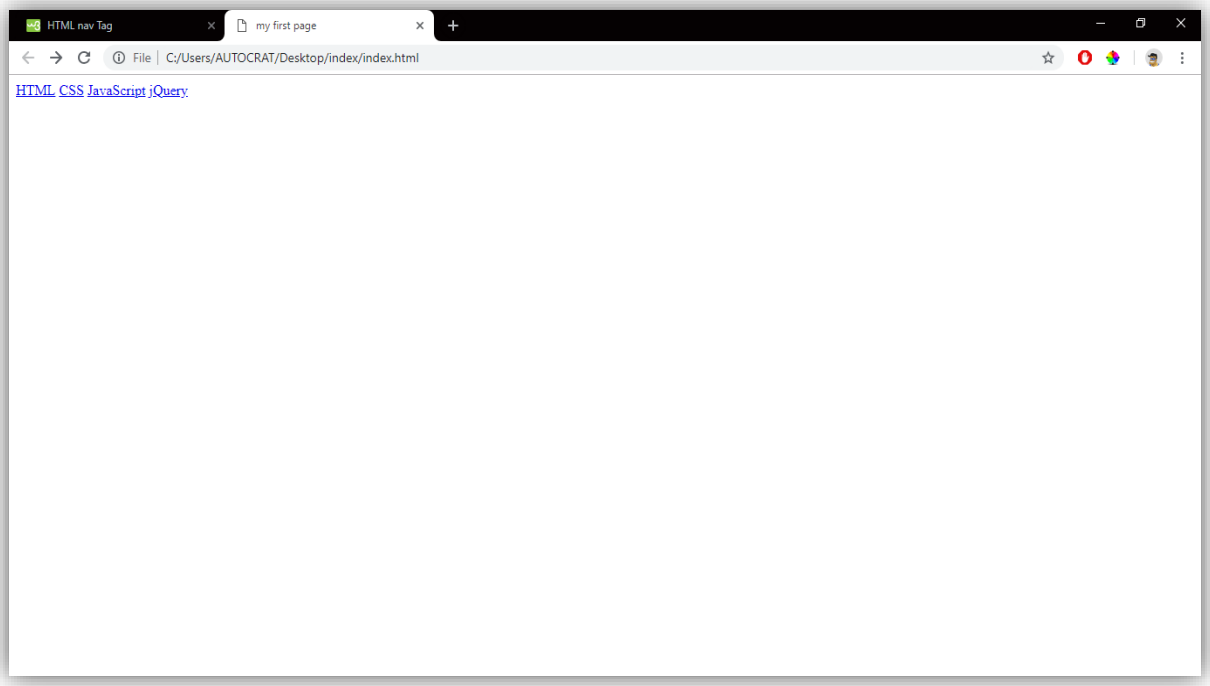
<nav>

The <nav> tag defines a set of navigation links. The <nav> element is intended only for major block of **navigation links**.

```
<nav>
  <a href="/html/">HTML</a>
  <a href="/css/">CSS</a>
  <a href="/js/">JavaScript</a>
</nav>
```

RECAP:

```
<!DOCTYPE html>
<html>
<head>
<title>my first page</title>
</head>
<body>
<nav>
  <a href="/html/">HTML</a>
  <a href="/css/">CSS</a>
  <a href="/js/">JavaScript</a>
  <a href="/jquery/">jQuery</a>
</nav>

</body>

</html>
```


HTML nav Tag
my first page
File | C:/Users/AUTOCRAT/Desktop/index/index.html
HTML CSS JavaScript jQuery

LISTS

<ul>

The <ul> tag defines an unordered or bulleted list. It is used together with the <li> tag to create unordered lists.

```
<ul>
  <li>Chicken</li>
  <li>Beans</li>
  <li>Meat</li>
</ul>
```

<ol>

The <ol> tag defines an ordered list. An ordered list can be numerical or alphabetical.it is used together with the <li> tag to define list items. You can use attributes to define which maker should start the list and many more.

ATTRIBUTES	VALUE	DESCRIPTION
Type	A/a/i/I/1	Defines which marker to start the ordered list
Start	"number"	Specifies which number to start the ordered list

```
<ol type="A">>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

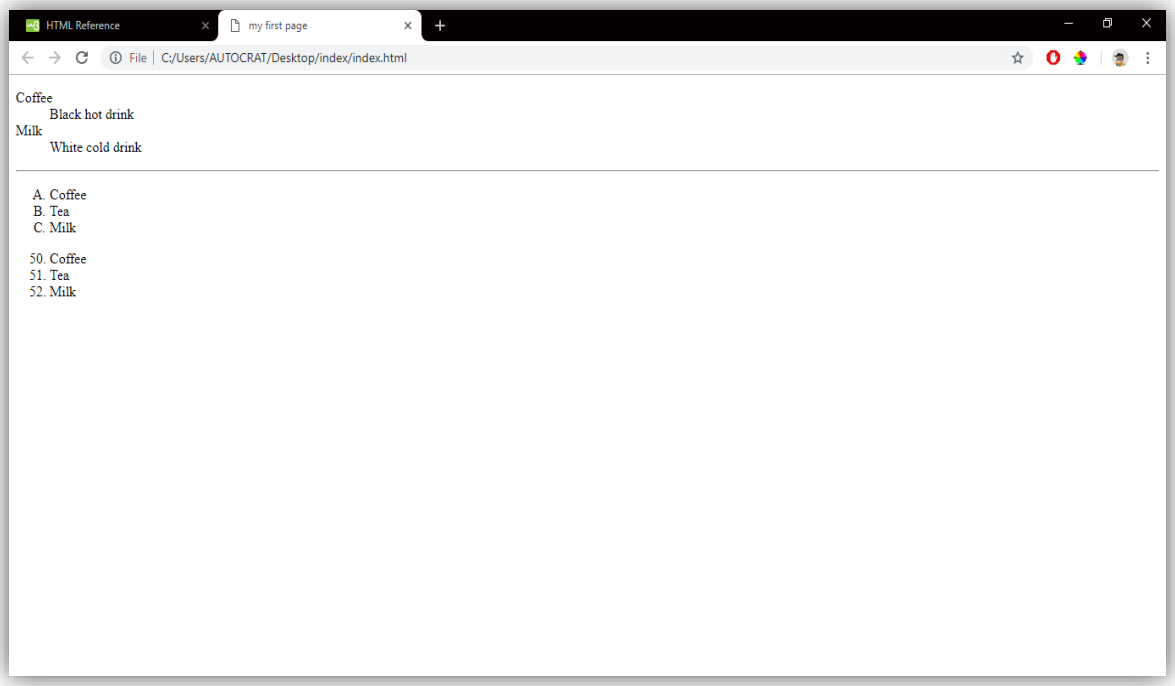
<dl>

The <dl> tag defines a description list. The <dt> tag inside the <dl> tag defines a term or name in a description list. The <dd> tag is used in conjunction with <dl> (defines a description list) and <dt> (defines terms/names). Inside a <dd> tag you can put paragraphs, line breaks, images, links, lists, etc.

```
<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl>
```

RECAP:

```
<!DOCTYPE html>
<html>
<head>
<title>my first page</title>
</head>
<body>
<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl><hr>
<ol type="A">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
</body>
</html>
```


HTML Reference
my first page
File | C:/Users/AUTOCRAT/Desktop/index/index.html
Coffee
Black hot drink
Milk
White cold drink
A. Coffee
B. Tea
C. Milk
50. Coffee
51. Tea
52. Milk

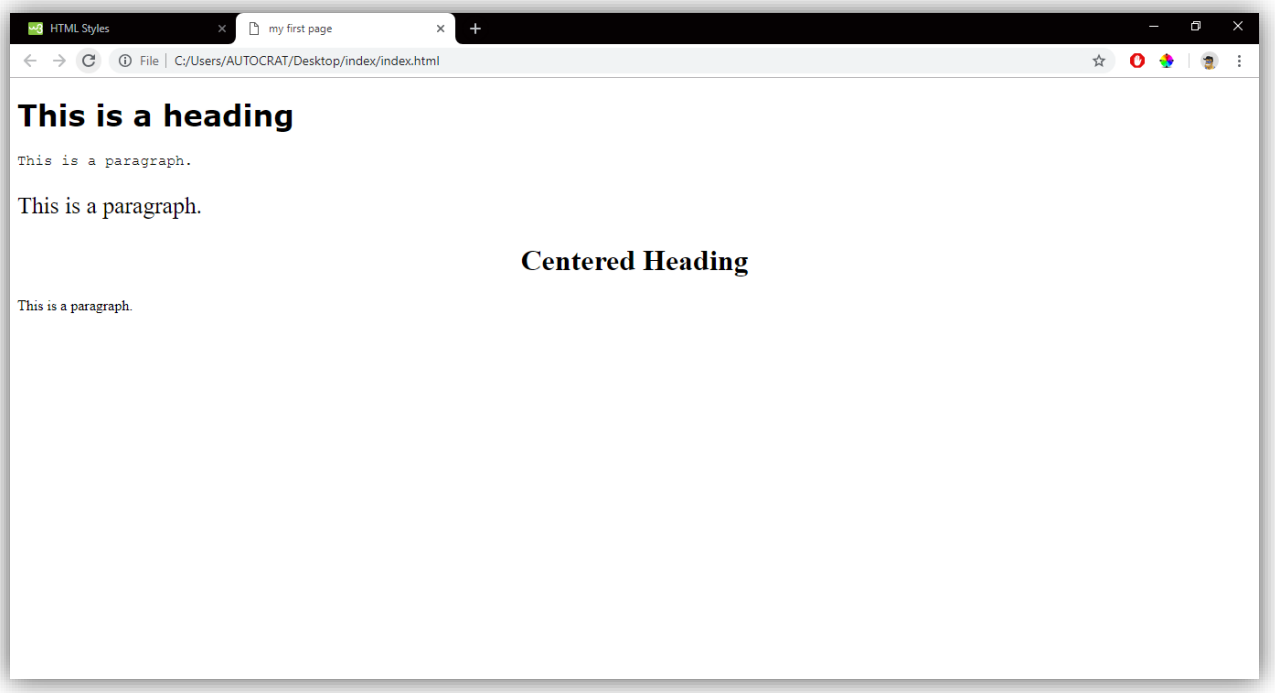
STYLING IN HTML

Setting the style of an HTML element, can be done with the **style attribute**.
Syntax:

```
style="property: value;"
```

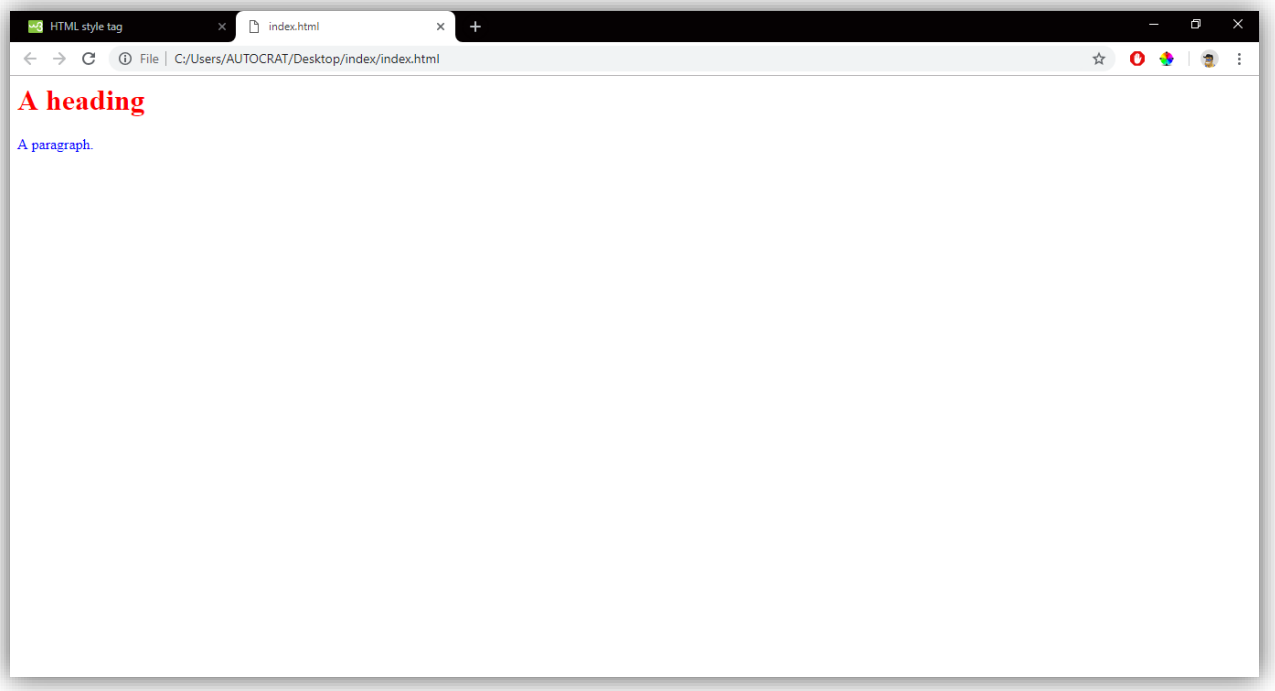
With this, you can set the background color, font, text size, text color, text alignment and more. Try out this code and see.

```
<!DOCTYPE html>
<html>
<head>
<title>my first page</title>
</head>
<body>
<h1 style="font-family:verdana;">This is a heading</h1>
<p style="font-family:courier;">This is a paragraph.</p>
<p style="font-size:160%;">This is a paragraph.</p>
<h1 style="text-align:center;">Centered Heading</h1>
<p>This is a paragraph.</p>
</body>
</html>
```



The other way is to use the <style> tag. This is used to define style information for an HTML document. Inside the <style> element, you specify how HTML elements should render in a browser like color, size, etc. Each HTML document you see online can contain multiple <style> tags. <Style> tag is placed in the head section. You use selectors to style the document. However, it is advisable to use external style sheets like CSS instead of including it in the HTML document.

```
<html>
<head>
<style>
h1 {color: red;}
p {color: blue;}
</style>
</head>
<body>

<h1>A heading</h1>
<p>A paragraph.</p>

</body>
</html>
```

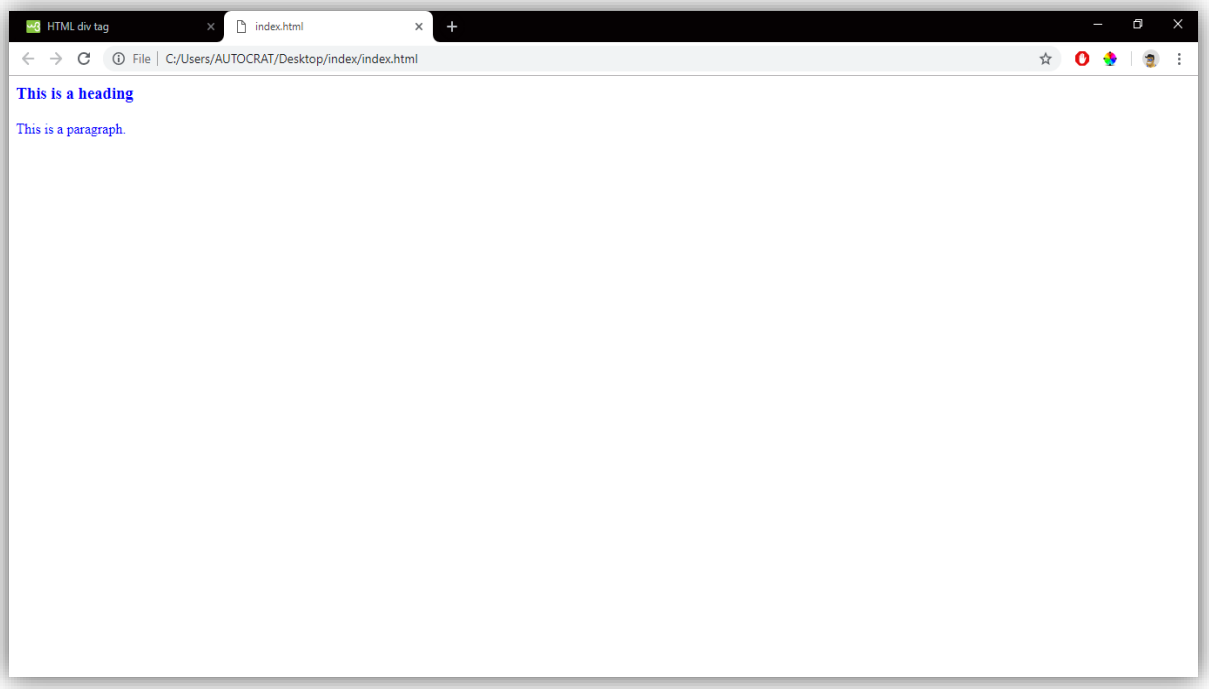


For more information, about style sheets and styling refer to;
https://www.w3schools.com/www.w3schools.com/css

HTML5 SEMANTICS

The tag defines a division or a section in an HTML document, the tag is used to group block-elements to format them with CSS

```
<div style="color: blue">
  <h3>This is a heading</h3>
  <p>This is a paragraph.</p>
</div>
```

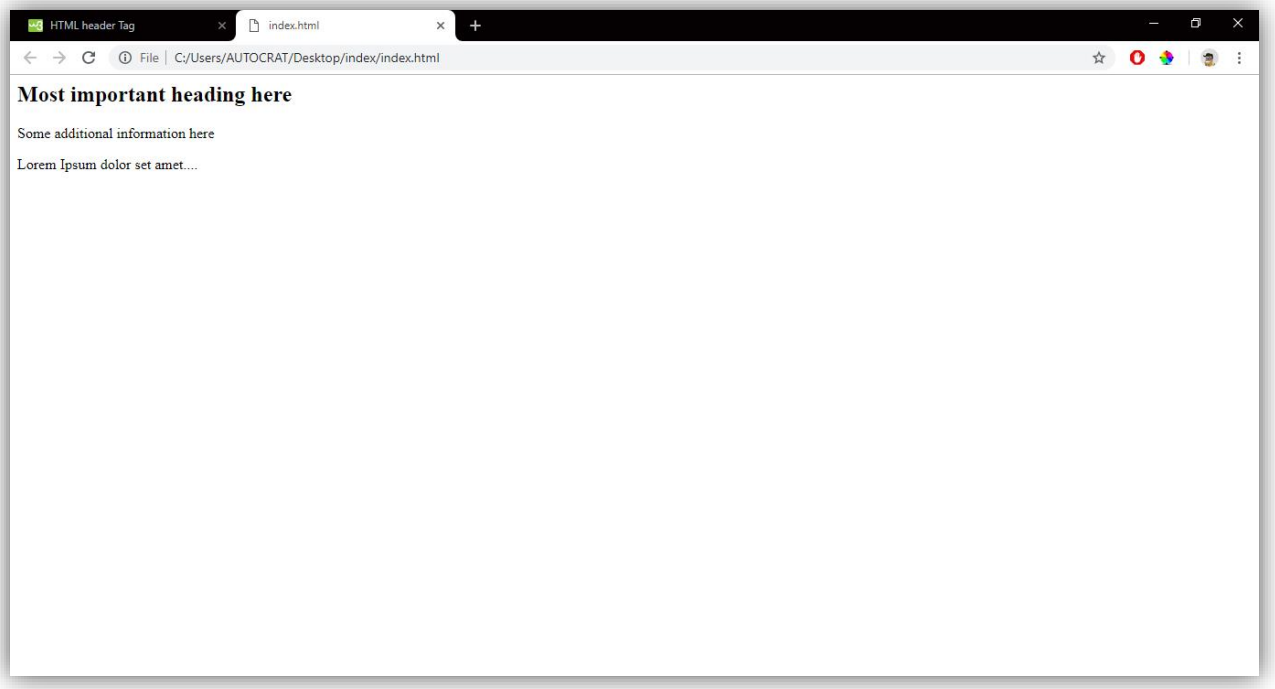


<header>

The <header> element represents a container for introductory content or a set of navigational links. A <header> element can contain one or more heading elements, logo or icon or authorship information

```
<article>
  <header>
    <h1>Most important heading here</h1>
       <p>Some additional information here</p>
  </header>
  <p>Lorem Ipsum dolor set amet....</p>
</article>
```

However the <header> cannot be placed in the <footer>, <address>, or within another <header> element.

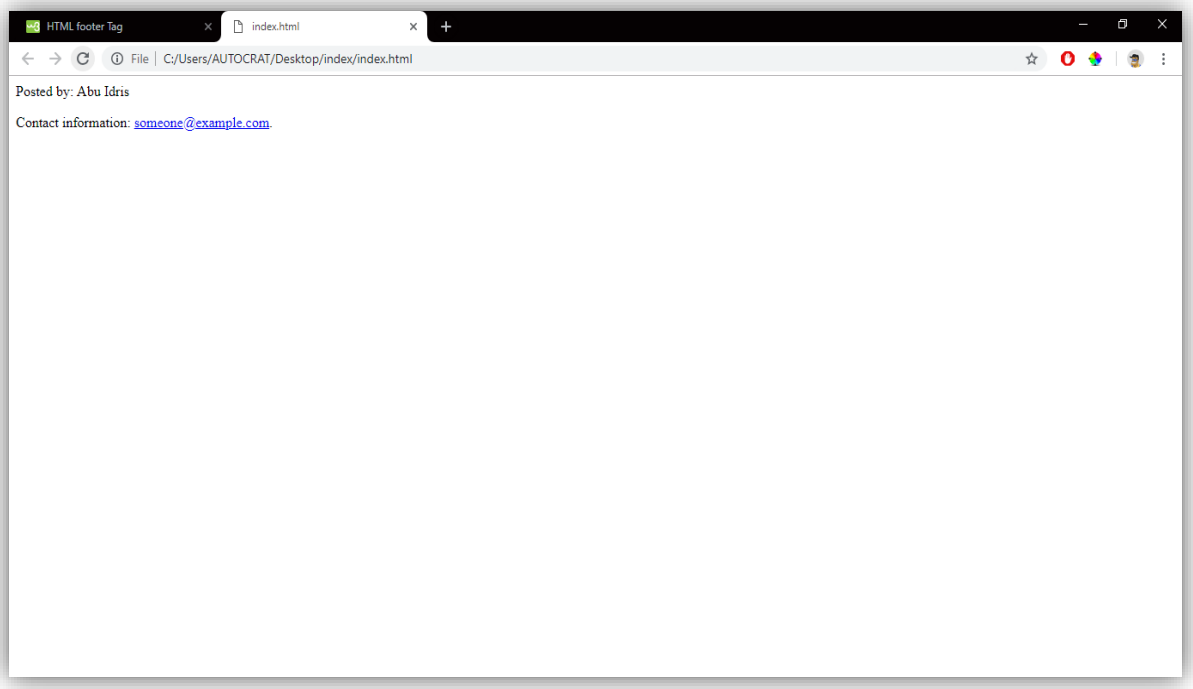


<footer>

The <footer> tag defines a footer for a document or section. A <footer> element usually contains information like address, copyright information, Links, documents and more. You can style these html semantics and give them border properties like color, size, and even give them different positions

NB: you can have as many footers as you want in the html document.
In addition, you cannot place a footer in header tag, or vice versa

```
<footer>
  <p>Posted by: Abu Idriss</p>
  <p>Contact information: <a href="mailto:someone@example.com">
  someone@example.com</a>.</p>
</footer>
```

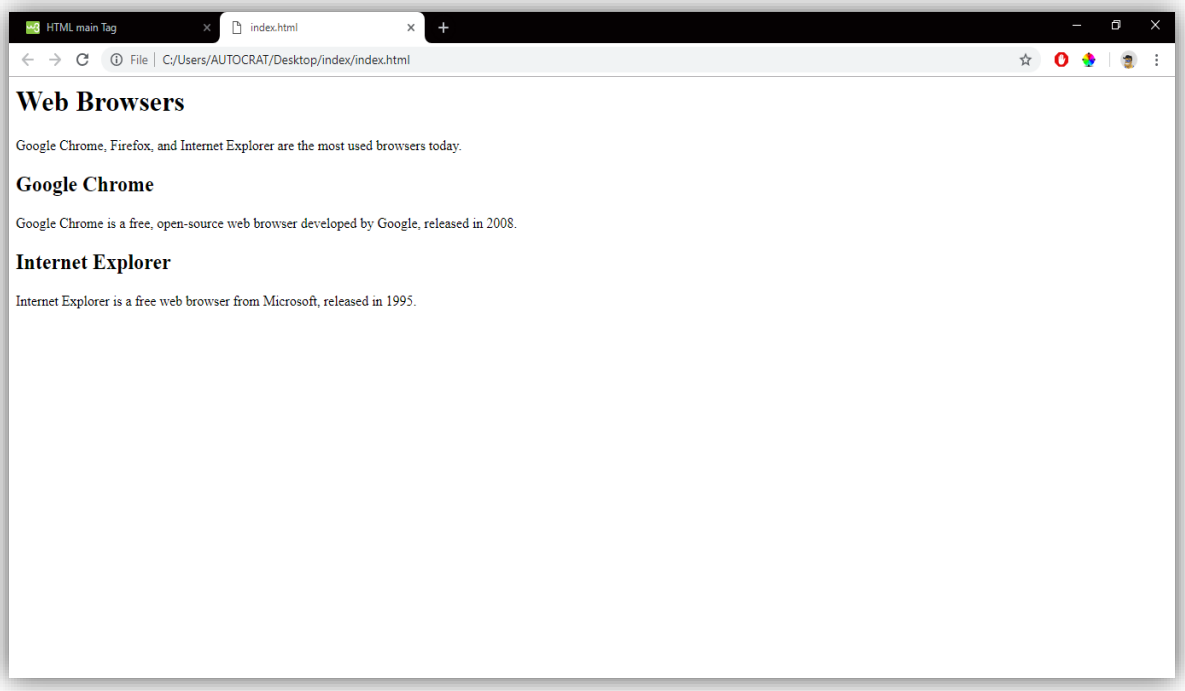


<main>

The <main> tag specifies the main content of a document like the articles, posts, pictures and more information about the web page. However, it should not contain any content that is repeated across documents such as sidebars, navigation links, copyright information, site logos, and search forms.

> **NB:** There must not be more than one <main> element in a document. The <main> element must **NOT** be placed in any other tag like <footer>, <aside> and more.

```
<main>
  <h1>Web Browsers</h1>
  <p>Google Chrome, Firefox, and Internet Explorer are the most used browsers
today.</p>
  <article>
    <h1>Google Chrome</h1>
    <p>Google Chrome is a free, open-source web browser developed by Google,
    released in 2008.</p>
  </article>
  <article>
    <h1>Internet Explorer</h1>
    <p>Internet Explorer is a free web browser from Microsoft, released in
1995.</p>
  </article>
</main>
```



<section>

The <section> tag defines sections in a document, such as chapters, headers, footers, or any other sections of the document.it is also useful when you to style a particular part in your document.

```
<section>
  <h1>WWF</h1>
  <p>The World Wide Fund for Nature (WWF) is....</p>
</section>
```

<article>

The <article> tag specifies independent, self-contained content. An article should make sense on its own for example blog post, forum post, news story, comments etc.

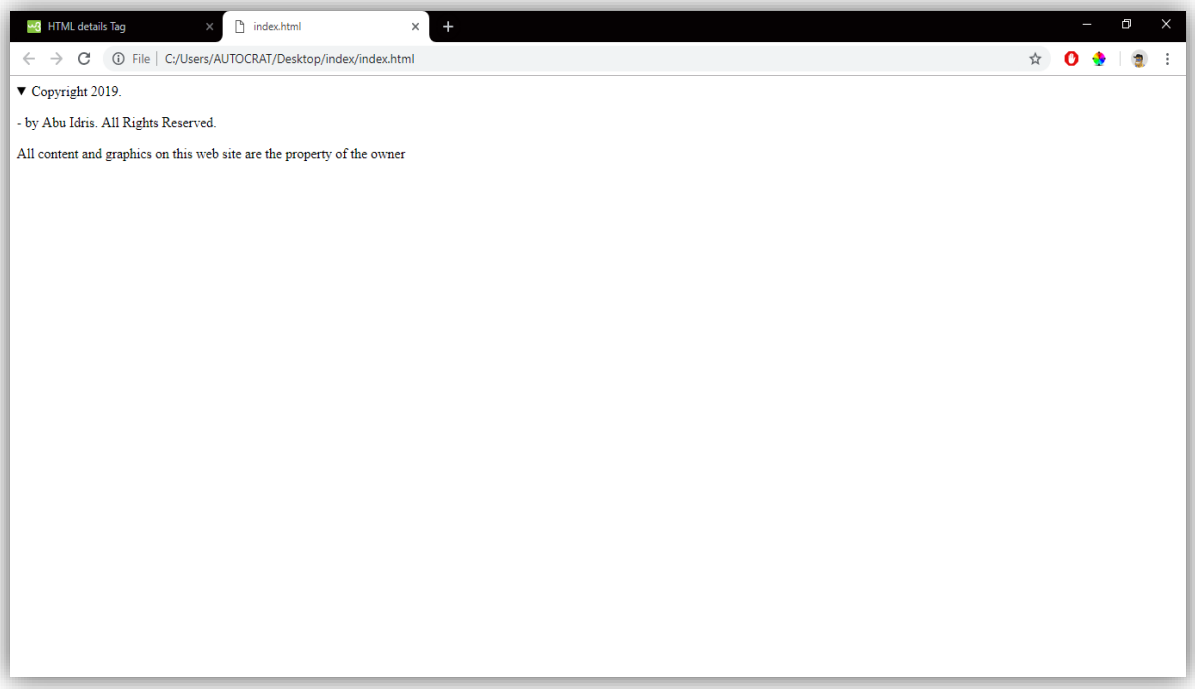
<aside>

The <aside> tag defines some content aside from the content it is placed in. The aside content should be related to the surrounding content. It also can contain links to related documents, downloads, and ads.

<details>

The <details> tag specifies additional details that the user can view or hide on demand. It can be used to create an interactive widget that the user can open and close. The <summary> tag defines a visible heading for the <details> which can be clicked to view/hide the details. The content of a <details>. To view the details, the open attribute must be set. Look at the next two examples to see how it works.

```
<details open=”open”>
  <summary>Copyright 2019.</summary>
  <p> - by Abu Idris. All Rights Reserved.</p>
  <p>All content and graphics on this web site are the property of the
owner</p>
</details>
```



<dialog>

The <dialog> tag defines a dialog box or window. The <dialog> element makes it easy to create popup dialogs and modals on a web page.it needs the open attribute to be set for it to be visible

CHALLENGE:

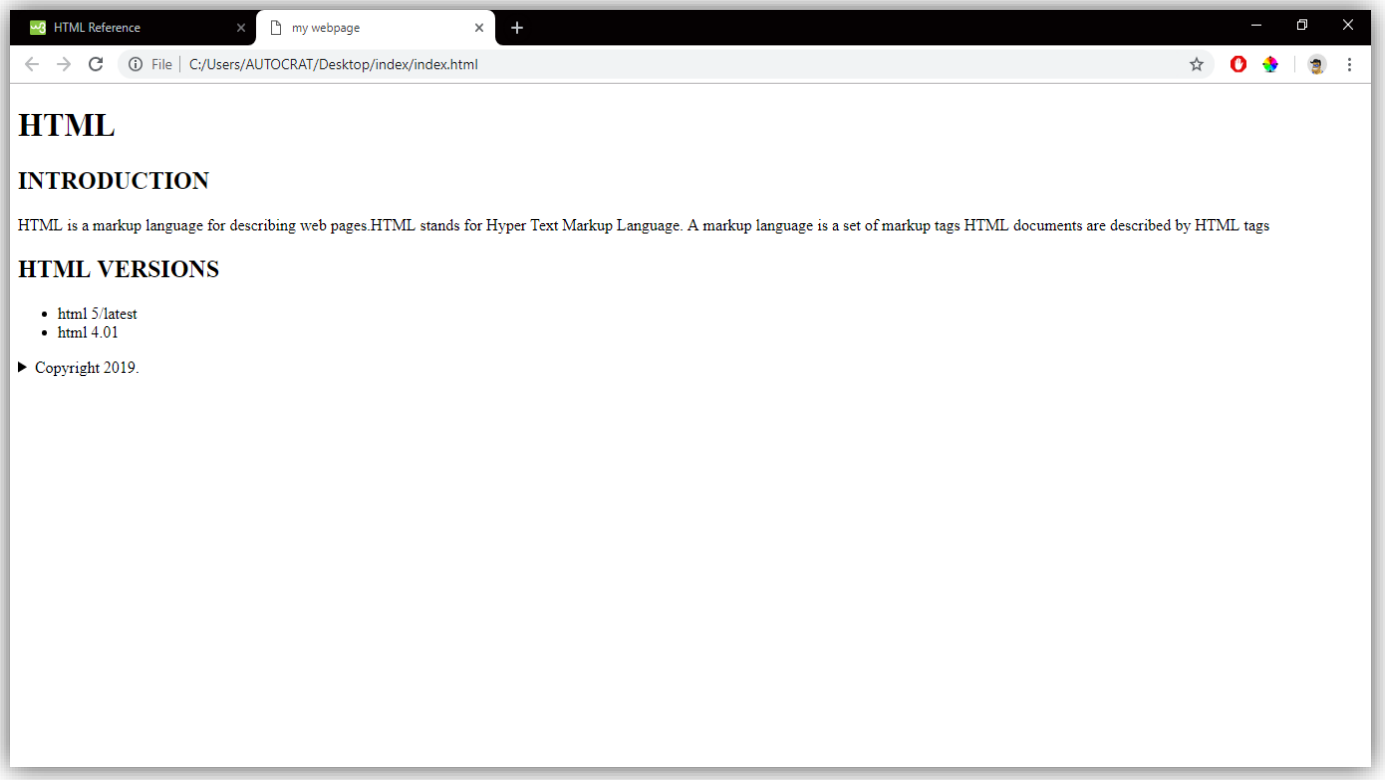
Design a web page similar to this. Use the relevant tags you have studied in the previous chapters.

"Code is learnt by doing, not just reading. Good luck"

Instructions:

1. I see a header
2. I see a <main> tag
3. Inside the <main> tag, I see two sections one with the heading "introduction" and other with heading of html versions.
4. At least I see one paragraph.
5. I see unordered list.
6. I see a footer.
7. I see a details tag inside the footer with attribute open set to open.

8. Be free to add in anything you have learnt to make a cool web structure



TABLES

In HTML, you can draw tables. An HTML table consists of the <table> element and one or more <tr>, <th>, and <td> elements. The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell. A more complex HTML table may also include <caption>, <col>, <colgroup>, <thead>, <tfoot>, and <tbody> elements.

<table>

The <table> tag simplt defines an HTML table.

<tr>

The <tr> tag defines a row in an HTML table.

<td>

The <td> tag defines a standard cell in an HTML table. Standard cells usual contains data

<th>

The <th> tag defines a header cell in an HTML table. Header cells contains header information

<caption>

The <caption> tag defines a table caption which will by default be centered.it must be inserted immediately after the <table> tag

<thead>

The <thead> tag is used to group header content in an HTML table. The <thead> element is used in conjunction with the <tbody> and <tfoot> elements to specify each part of a table (header, body, footer).

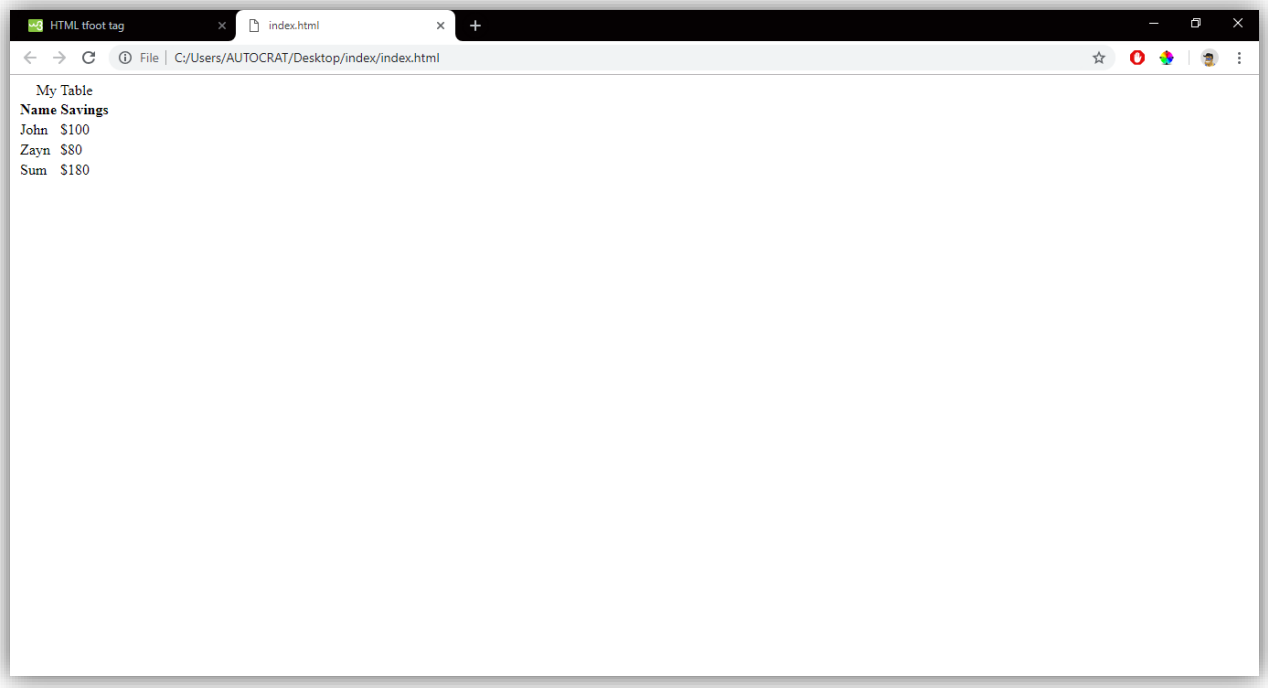
<tbody>

The <tbody> tag is used to group the body content in an HTML table.

<tfoot>

The <tfoot> tag is used to group footer content in an HTML table. Browsers can use the <tfoot>, <thead> and <tbody> elements to enable scrolling of the table body independently of the header and footer. In addition, 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. Irrespective of where you place it, the table header will always be on top of the table and the table footer will always be at the end of the table.

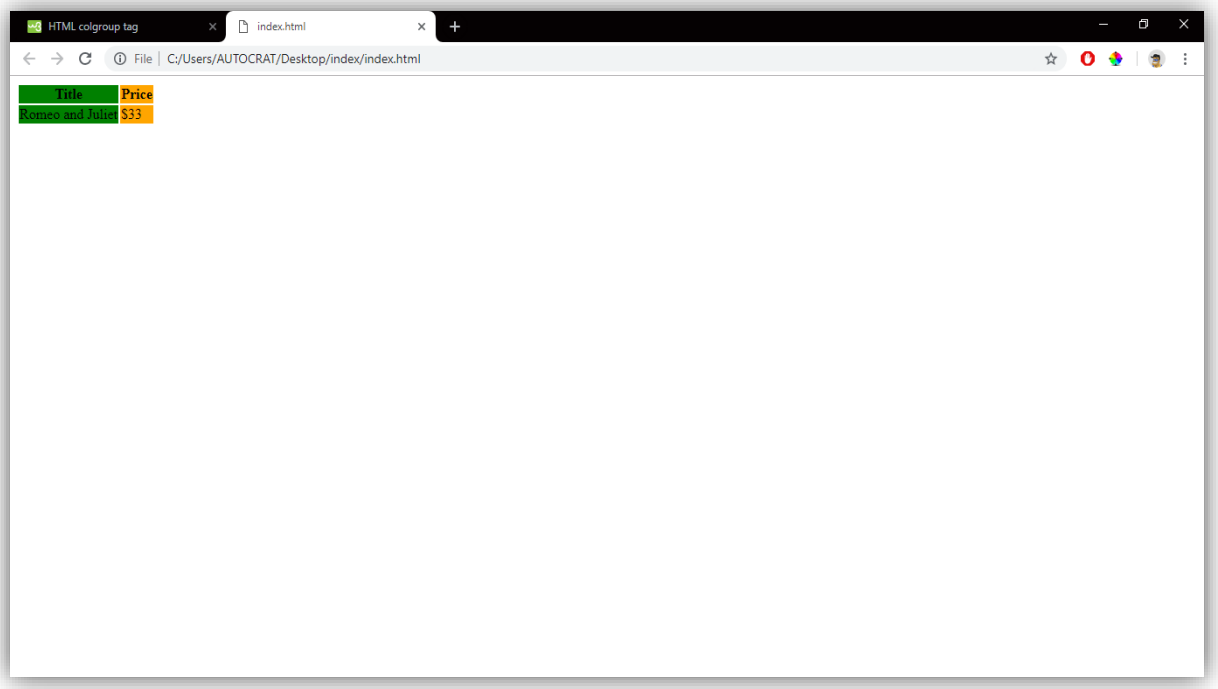
```
<table>

<caption>My Table<caption>
  <thead>
    <tr>
      <th>Name</th>
      <th>Savings</th>
    </tr>
  </thead>
  <tfoot>
    <tr>
      <td>Sum</td>
      <td>$180</td>
    </tr>
  </tfoot>
  <tbody>
    <tr>
      <td>John</td>
      <td>$100</td>
    </tr>
    <tr>
      <td>Zayn</td>
      <td>$80</td>
    </tr>
  </tbody>
</table>
```



<colgroup> AND <col>

These are useful for applying styles to entire columns, instead of repeating the styles for each cell, for each row. The <colgroup> tag specifies a group of one or more columns in a table for formatting. The <col> tag specifies column properties for each column within a <colgroup> element. The <colgroup> tag must be a child of a <table> element, after any <caption> elements and before any <thead>, <tbody>, <tfoot>, and <tr> elements.

```
<table>
  <colgroup>
    <col style="background-color: green">
    <col style="background-color: orange">
  </colgroup>
  <tr>
    <th>Title</th>
    <th>Price</th>
  </tr>
  <tr>
    <td>Romeo and Juliet</td>
    <td>$33</td>
  </tr>
</table>
```


HTML colgroup tag
index.html
File | C:/Users/AUTOCRAT/Desktop/index/index.html
Title
Price
Romeo and Juliet
$33

DEPREACATED TAGS

Deprecate tags are tags which are **NO longer** used anymore. This is because they have been replaced with better alternate tag or CSS. There are also attributes that are deprecated therefore no longer supported in HTML5.the following is the list of deprecated tags along with their equivalent or CSS option

Tag	**Description**	**Alternate**
<applet>	Specifies an applet	<object>
<acronym>	Specifies an acronym	<abbr>
<basefont>	Specifies base font	
<big>	Specifies big/large text	Font-size(css)
	Specifies centered text	Text align(css)
<dir>	Specifies a directory list	
<embed>	Embeds an application in a document	<object>
<font>	Specifies text size, font and color	Font-family/size(css)
<frame>	Specifies a window in a frameset	
<frameset>	Specifies set of frames	
<noframe>	Specifies alternate text for browsers which don't support frames	
<isindex>	Specifies single line input	
<listing>	Specifies listing of items	<pre>
<menu>	Specifies menu list	
<plaintext>	Specifies plain text	<pre>
<s>/<strike>	Specifies strike through	Text-decoration(css)
<u>	Specifies underlined text	Text-decoration(css)
<xmp>	Specifies pre-formatted text	<pre>

HTML5 NEW TAGS

HTML 5 came with new tags in it and many where deprecated as seen in the previous section, following is a chart with HTML 5 new tags (we have seen them in action in the previous chapters, I am just identifying them).

<header>	<nav>	<footer>	<main>	<article>	<progress>
<section>	<dialog>	<details>	<figcaption>	<aside>	<meter>
<figure>	<mark>	<svg>	<object>	<wbr>	<menuitem>
<bdi>	<summary>	<ruby>	<rt>	<rp>	<embed>
<video>	<track>	<source>	<audio>	<canvas>	<output>
<datalist>	<keygen>				

HTML COLLECTIVE CHARACTER ENCODING

To display some characters in html, you have to write them in a special way called html entity or you can use DEC codes.

Character	**Entity**		**Dec**	**Description**
&	&amp		&#38	Ampersand
“	&quot		&#34	Quotations
<	&lt		&#60	Less than sign
>	&gt		&#62	Greater than sign
“non breaking space”				
©	&copy		&#169	Copyright symbol
•	&ouml		&#149	Small bullet
™	&ucirc		&#153	Trademark symbol

®	&reg		&#174	Registered symbol
¥	&yen		&#165	Yen symbol
@	&Uuml		&#64	@ symbol