

HTML5 & CSS



Introduction

This lesson is designed to begin the learner's track toward discovery and application in web development and design, learning this unit do not necessarily requires experience and technical background in web development.

Objective

At the end of this lesson, the student will be able to:

understand HTML and CSS Concept, know the HTML Tags and Syntax, create a basic style sheet, use style classes, use style IDs, and construct internal style sheets and inline styles.

HTML

In 1990, **Tim Berners-Lee** invented the HTML.

HTML stands for **HyperText Markup Language**.

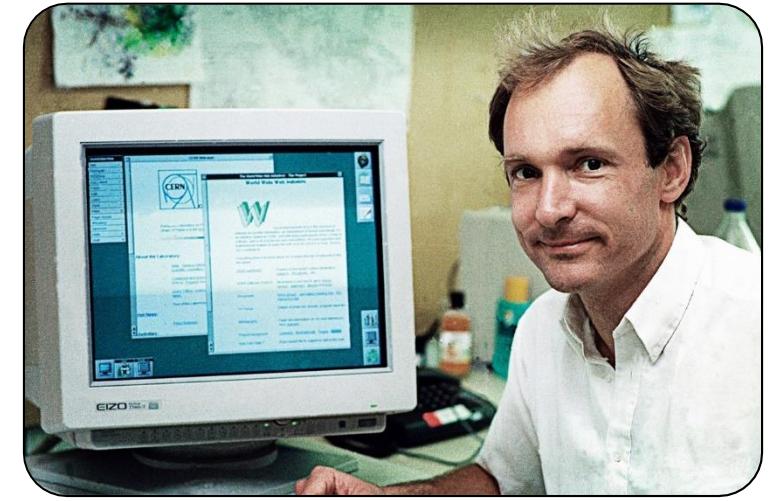
This is the *Language* used to **create** and **link** Web pages together.

It is the “mother tongue” of a website.

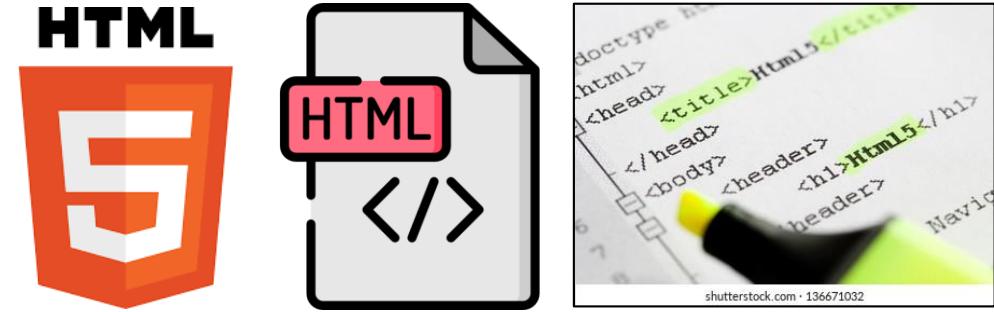
An HTML document consists of **only text** – the main text of the document and special instructions called **tags** (a Web page is designed by using tags).

Tags are the basic coding units in the HTML system (they are key words or phrases that are enclosed by angle brackets <>).

Tags **describe** how graphics and text are **to be displayed** and used to **create links** between documents.



HTML

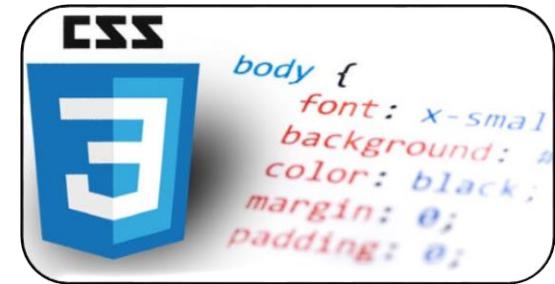


It is a **descriptive language** used to describe a document's layout, image position, font size, font color, etc.

HTML is **not a programming language**, and it cannot complete tasks regarding programming (arithmetic or the use of variables), not even the simplest program logic such as, for example, the operation of addition.

HTML pages are nothing but **plain text** files with instructions on **how to display a page**, they can be created in **any text editor** such as, for example, Notepad, Notepad++, Komodo and the like.

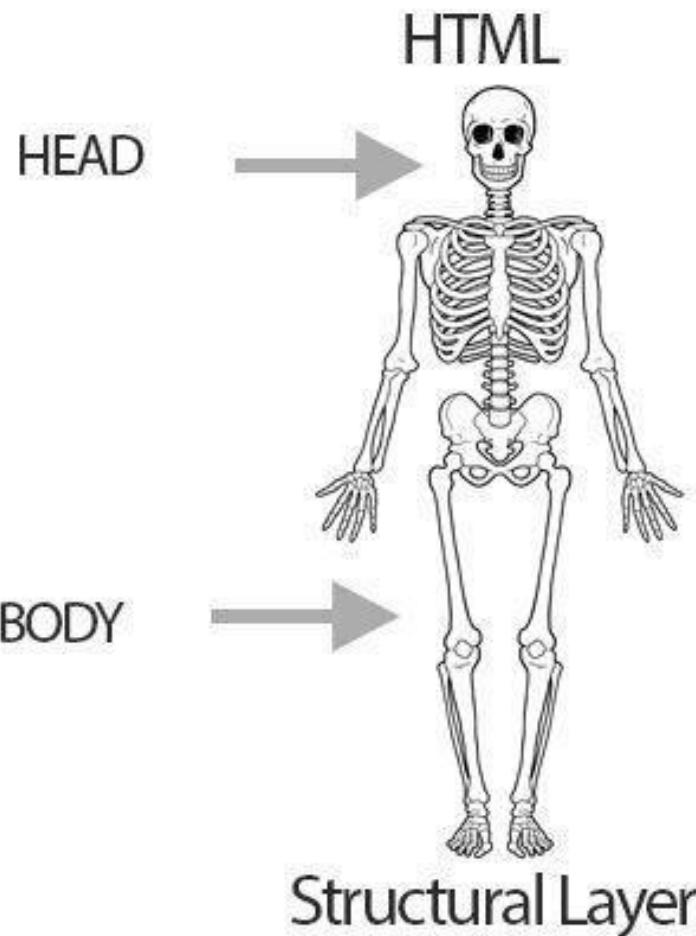
CSS



Cascading Style Sheets (CSS) are a powerful way to separate content from design in your Web Forms applications.

An effective use of CSS is an easy way to **maintain** and **consolidate** the **visual aspects** of Web development.

The concept behind style sheets is simple: **Create a style sheet document that specifies the fonts, colors, spacing, and other characteristics that establish a unique look for a website.**

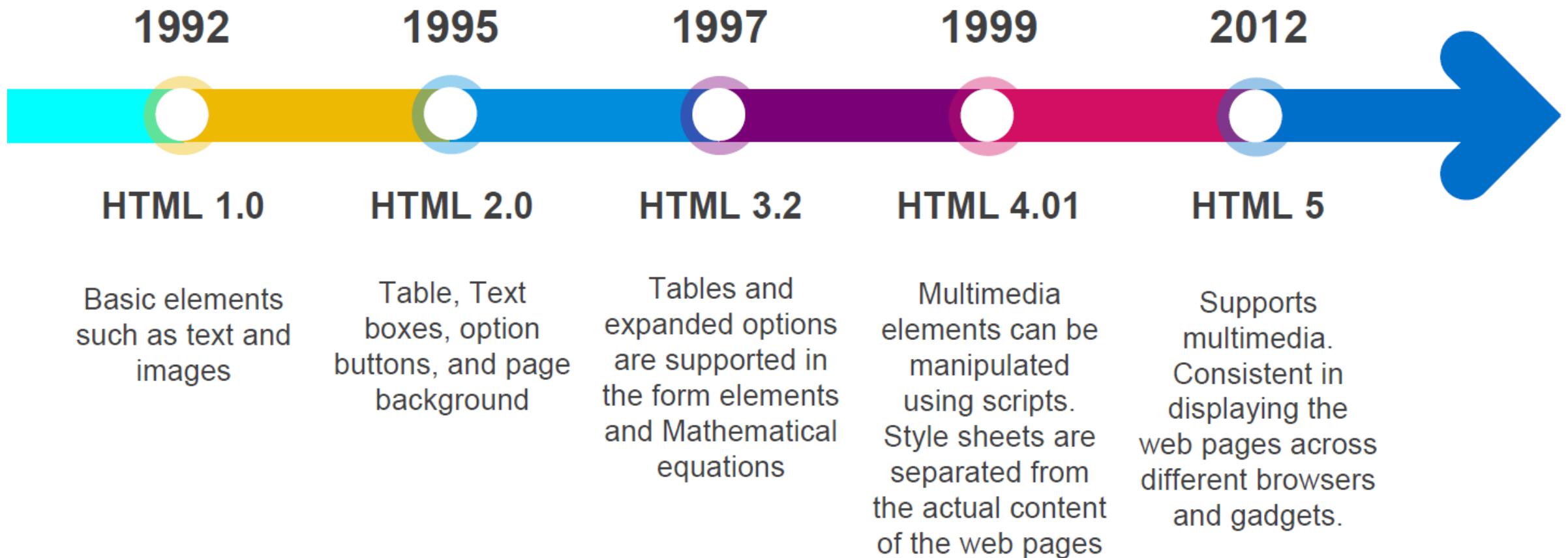


Web Pages

Text File that follows a certain structure in order for the web browser to correctly displays the web page.



HTML Version



HTML5



HTML5 document follows a structure in presenting information in the Web



Consists of different elements which is the building blocks of the web document.



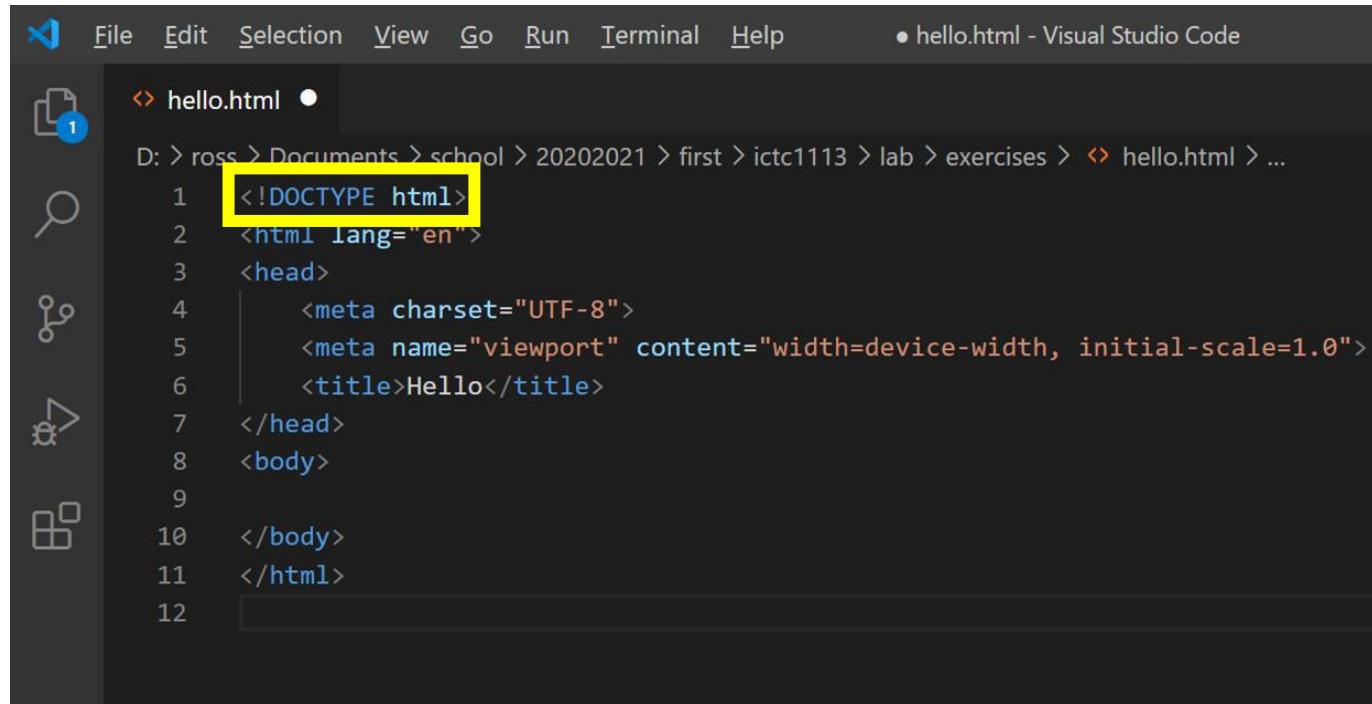
Element is composed of tags and contents.
For example: <h1> Hello, World!</h1>.

HTML Element

- <html>
- <head>
- <meta>
- <title>
- <body>
- <header>
- <h1>,...,<h6>
- <p>
- <a>
-
- , ,
- <hr>
-

- <main>
- <footer>
- <div>
-
- <form>
- <input>
- <textarea>
- <select>,<option>
- <button>
- <label>
- <table>, <tr>, <td>, <th>
- , , <i>
- <audio>, <video>
- , <u>, <s>

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar says "File Edit Selection View Go Run Terminal Help" and "hello.html - Visual Studio Code". The left sidebar shows a file tree with "hello.html" selected. The main editor area displays the following HTML code:

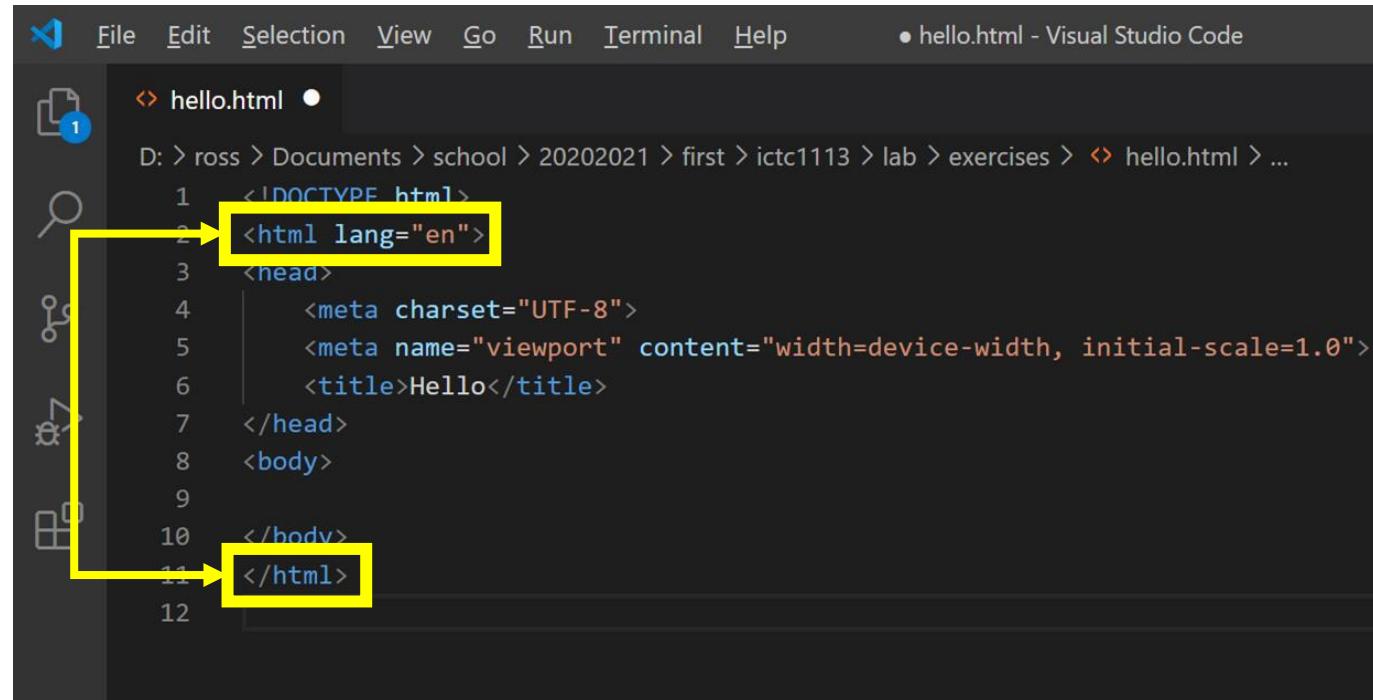
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

The first line, "<!DOCTYPE html>", is highlighted with a yellow box.

<!DOCTYPE html>
declaration indicates
that this document is
an HTML document.

<!DOCTYPE html> is
basically not an HTML
tag but used to start
the HTML5 document.

Web Page Skeleton



The screenshot shows a Visual Studio Code interface with the file 'hello.html' open. The code editor displays the following HTML skeleton:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Hello</title>
  </head>
  <body>
  </body>
</html>
```

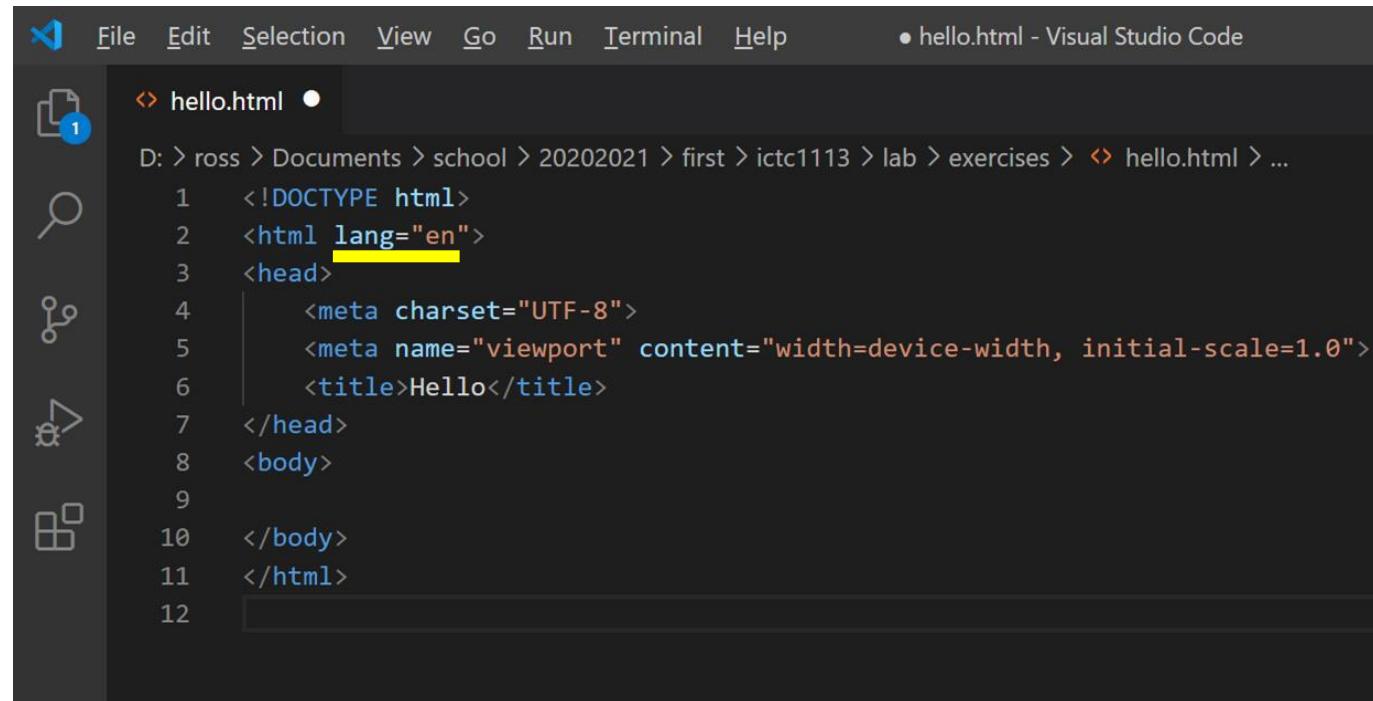
A yellow box highlights the entire content area between the opening `<html>` tag at line 2 and the closing `</html>` tag at line 11. Arrows point from the left edge of the yellow box to both the start and end of this highlighted section.

It means that the latest tag that you have opened should also be the first tag you need to close.

Everything that is inside the `<html>` and `</html>` tags are part of the HTML document.

`<html>` tag follows the principle of Last-In-First-Out (LIFO) that's why `</html>` tag is placed at the end of the file.

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar says "File Edit Selection View Go Run Terminal Help" and "hello.html - Visual Studio Code". The left sidebar shows a file tree with "hello.html" selected. The main editor area contains the following HTML code:

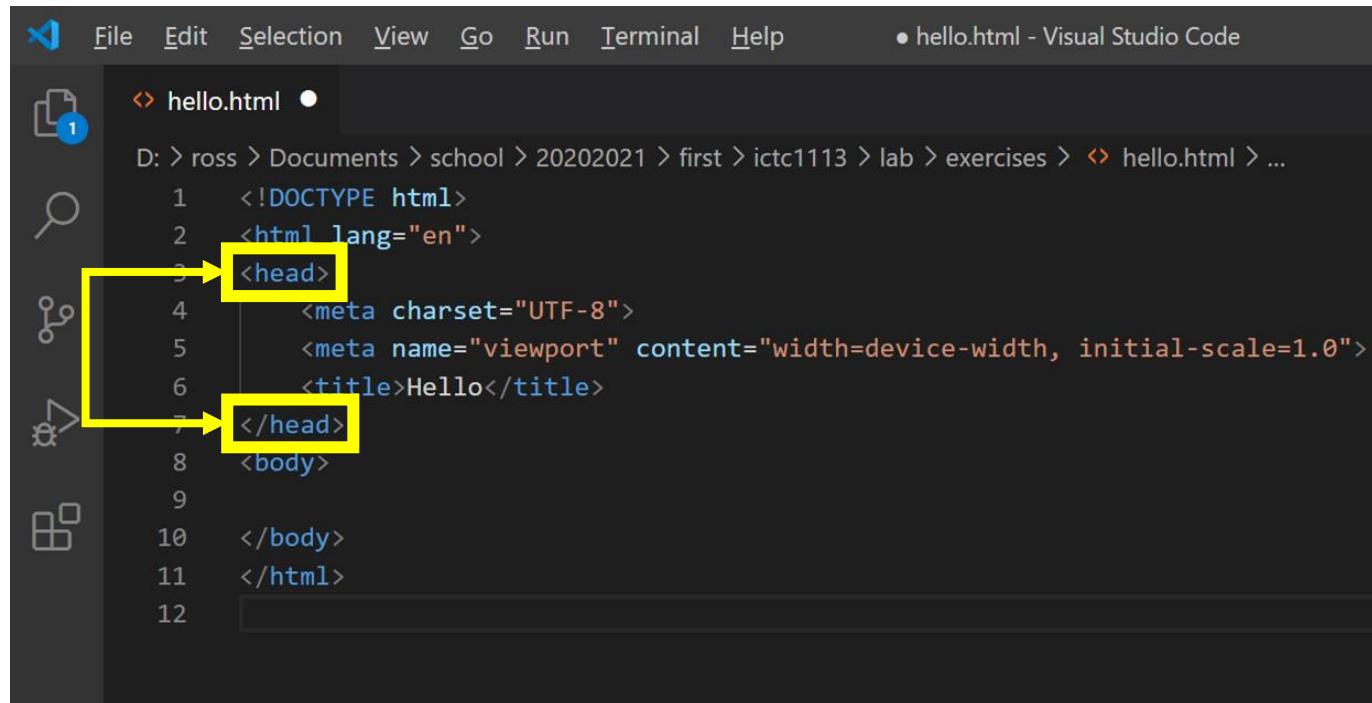
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

<html> tag has additional information (attribute) and it is added inside the open tag.

The syntax for tag with attribute is:
<tag attribute="value"></tag>

Here, it set the **language (lang)** attribute to **English (en)**.

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar shows "File Edit Selection View Go Run Terminal Help" and "hello.html - Visual Studio Code". The left sidebar has icons for file, search, and other tools. The main editor area shows the following code:

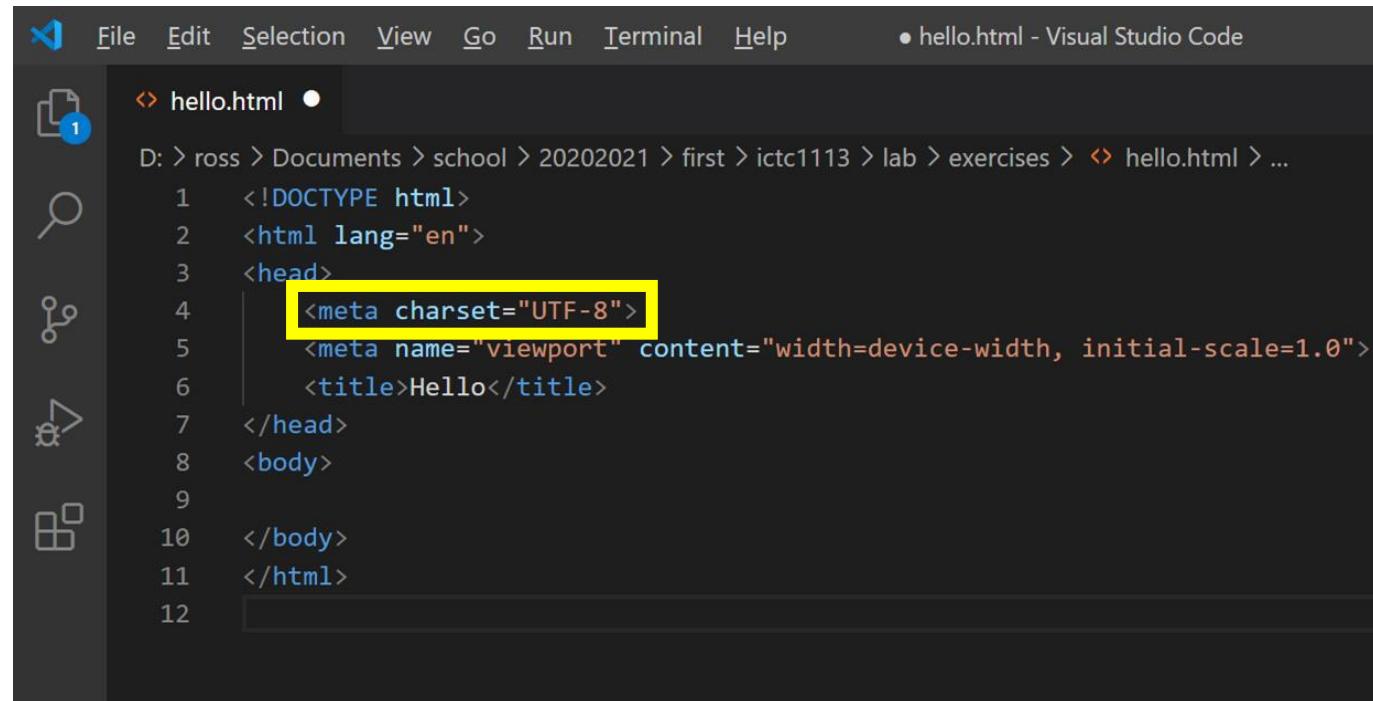
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

The lines containing the opening and closing `<head>` tags are highlighted with a yellow box and arrows pointing to them.

The **<head>** tag should reside inside the **<html>** tag.

The **<head>** tag contains some information about the **HTML** document.

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar says "File Edit Selection View Go Run Terminal Help" and "hello.html - Visual Studio Code". The left sidebar shows a folder icon with a blue circle containing the number 1, indicating one file is open. The main editor area shows the following HTML code:

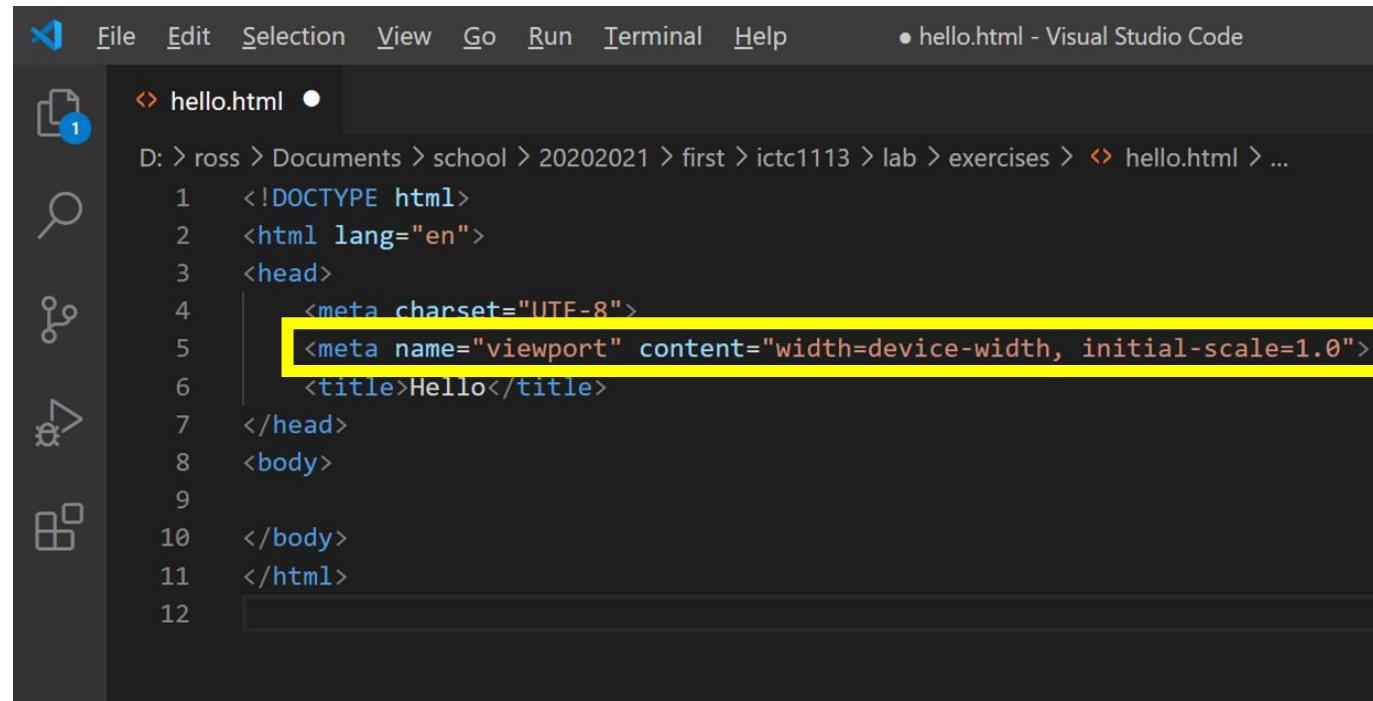
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |  <meta charset="UTF-8">
5  |  <meta name="viewport" content="width=device-width, initial-scale=1.0">
6  |  <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

<meta> tag defines information about the document.

First **<meta>** tag, the attribute **charset** is set to **UTF-8** means character encoding for Unicode.

UTF-8 (Unicode Transformation Format - 8-bit) is a character encoding system that encodes text as a series of variable-length bytes, making it one of the most widely used encodings on the web

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar shows "File Edit Selection View Go Run Terminal Help" and "• hello.html - Visual Studio Code". The left sidebar has icons for file, search, and other tools. The main editor area shows the following HTML code:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Hello</title>
7 </head>
8 <body>
9
10 </body>
11 </html>
```

The line containing the second `<meta>` tag is highlighted with a yellow box.

Setting the value of viewport will allow our web page to adjust accordingly to the different sizes of different gadgets we use.

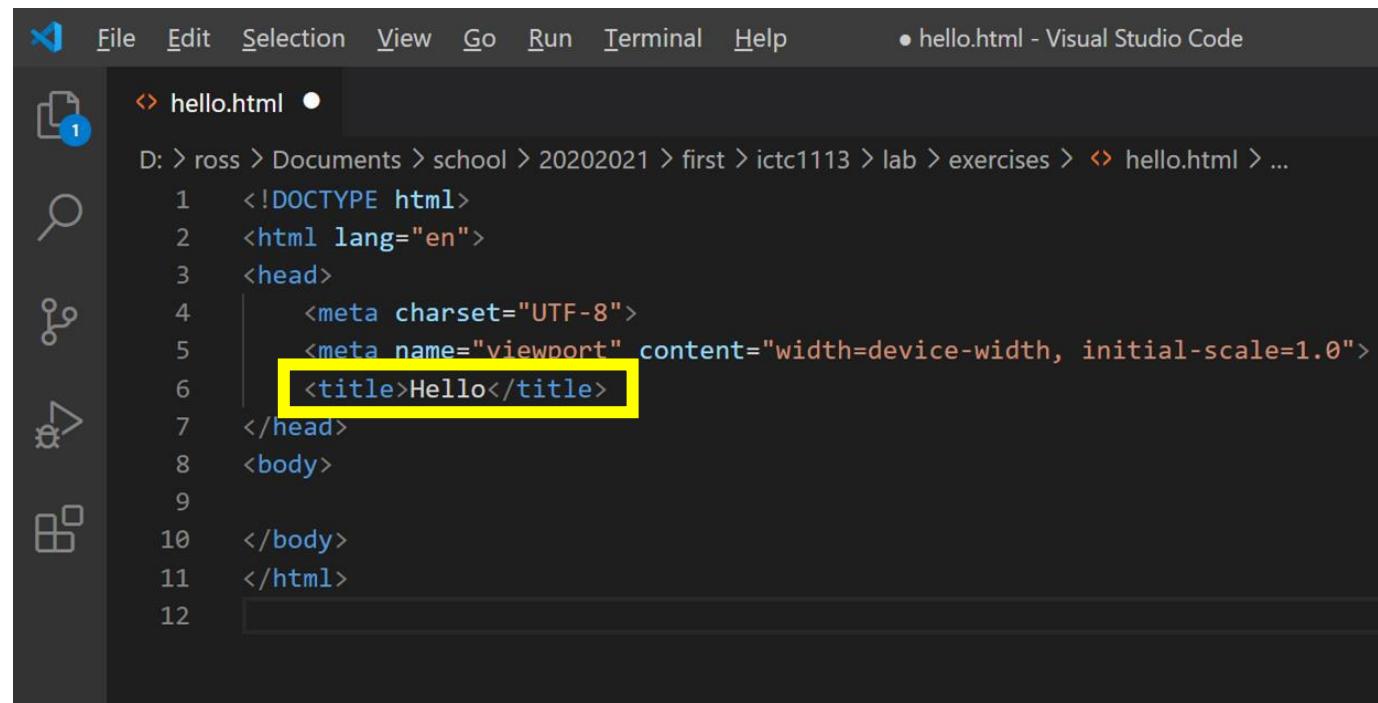
Second `<meta>` tag has two attribute set.

The attribute **name** set the name of the information to be changed.

The information that will be changed in the second meta will be the **viewport**.

Contentviewport is set in the **contentattribute**.

Web Page Skeleton



A screenshot of the Visual Studio Code interface. The title bar says "File Edit Selection View Go Run Terminal Help" and "hello.html - Visual Studio Code". The left sidebar has icons for file, search, and refresh. The main editor area shows the following code:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

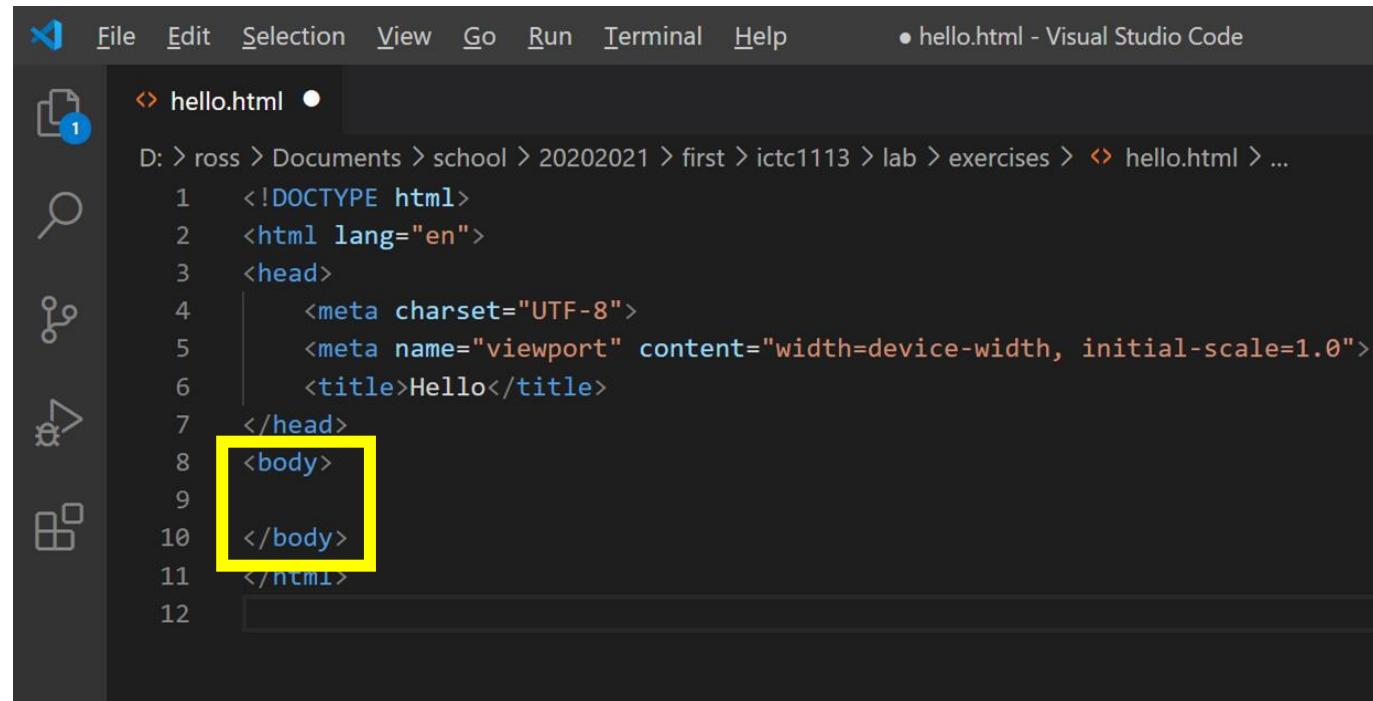
The line containing the title tag, "`<title>Hello</title>`", is highlighted with a yellow box.

<title> tag defines the title of the document which is shown in the browser page tab.

In this example, the title of the page is set to 'Hello'.



Web Page Skeleton



The screenshot shows the Visual Studio Code interface with a dark theme. A single file, 'hello.html', is open in the center editor area. The code is as follows:

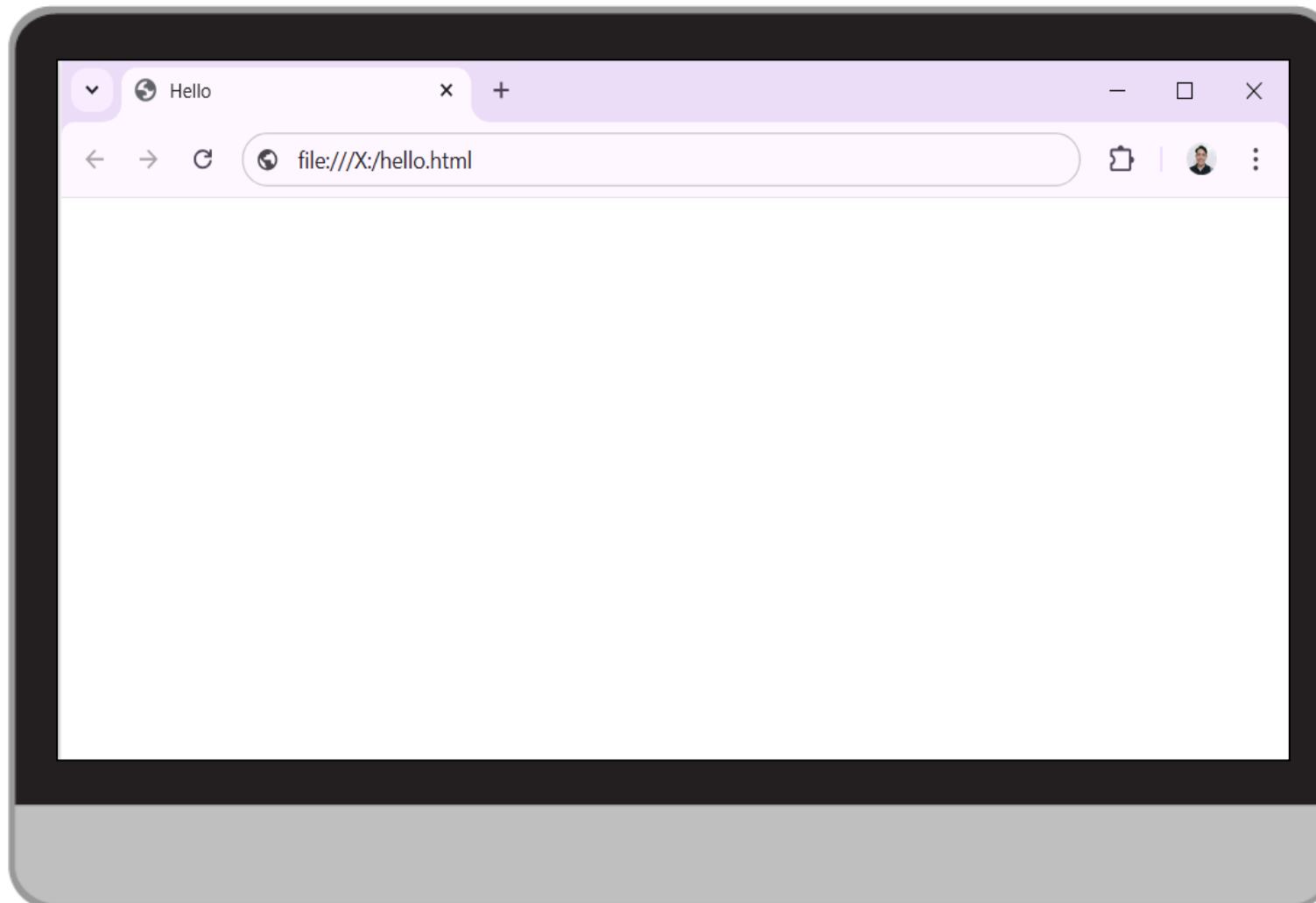
```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Hello</title>
7  </head>
8  <body>
9
10 </body>
11 </html>
```

A yellow box highlights the entire **<body></body>** block.

<body> tag represents the document's body where the user sees information.

Any Display in Window of the web browser should be inside the **<body></body>** tag

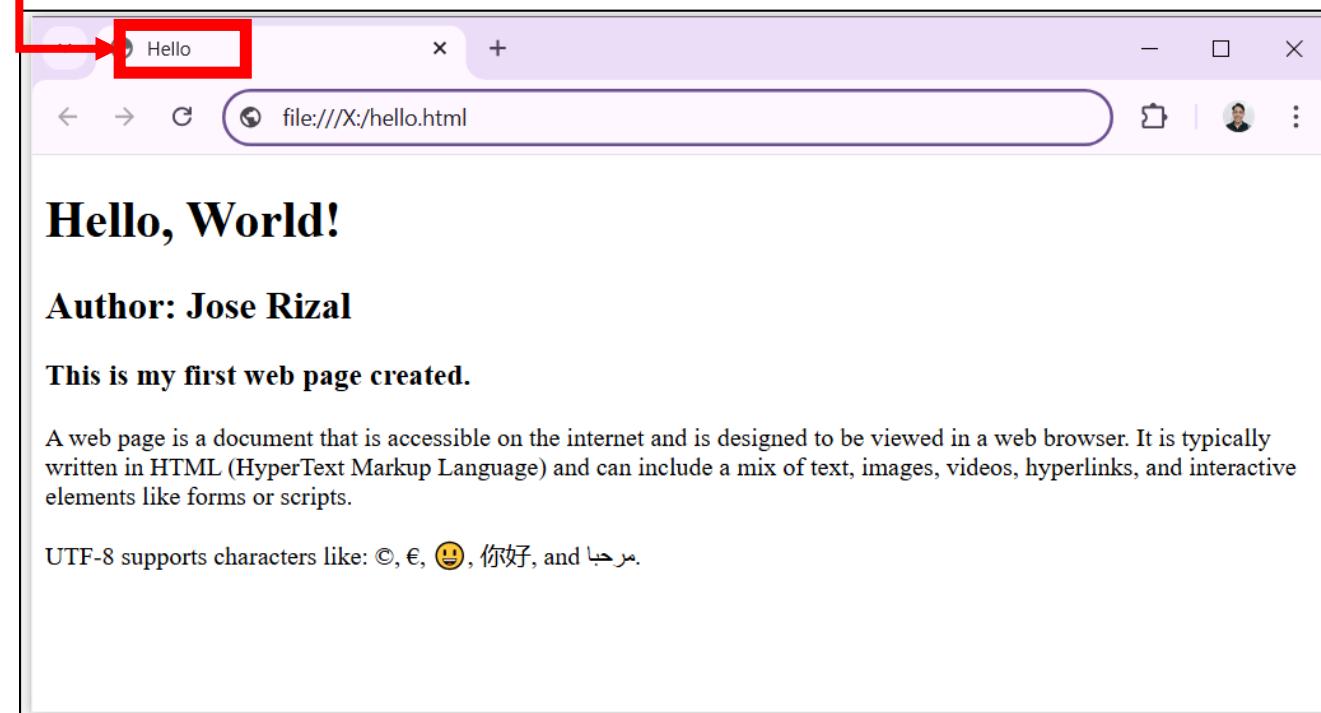
Web Page Skeleton



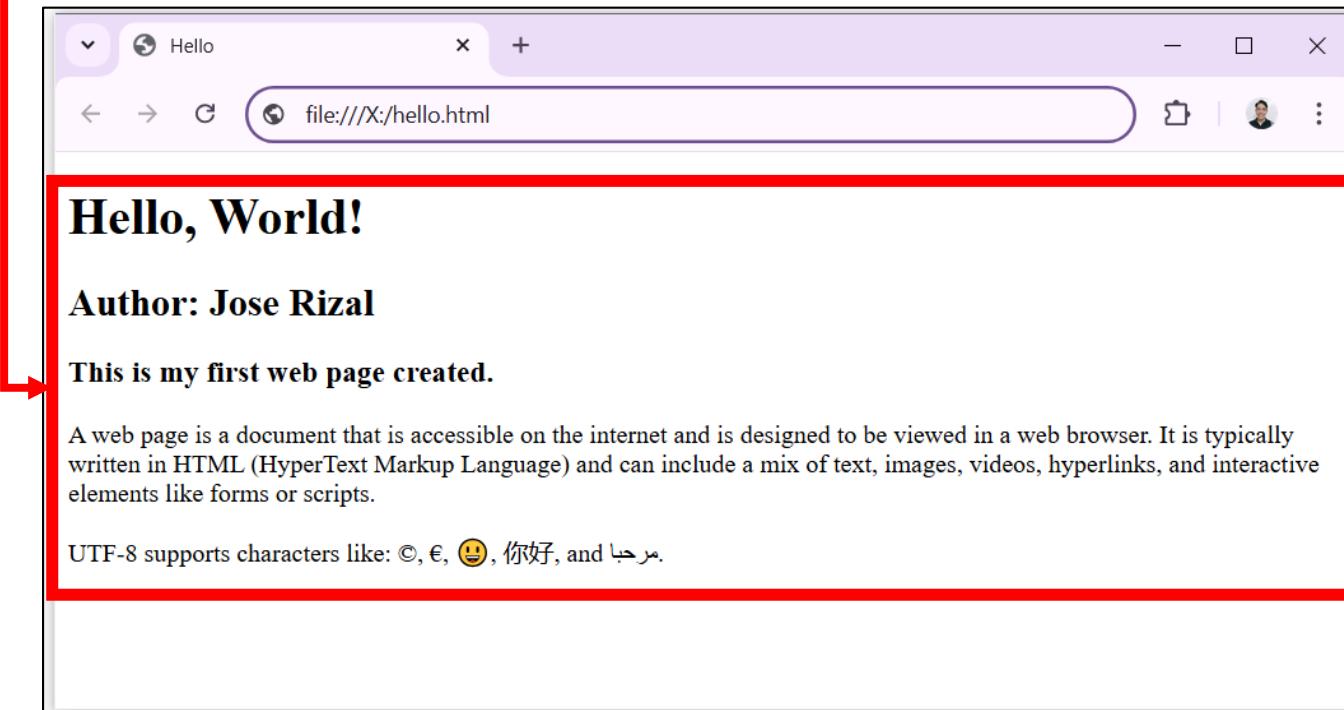
To view the web page we created, in the **File Explorer**, **double click** the file we have created. The '**hello.html**' file.

Notice that the text in the tab bar is **Hello**. This is displayed since we set the title of our document with 'Hello' using the **<title></title>** tags.

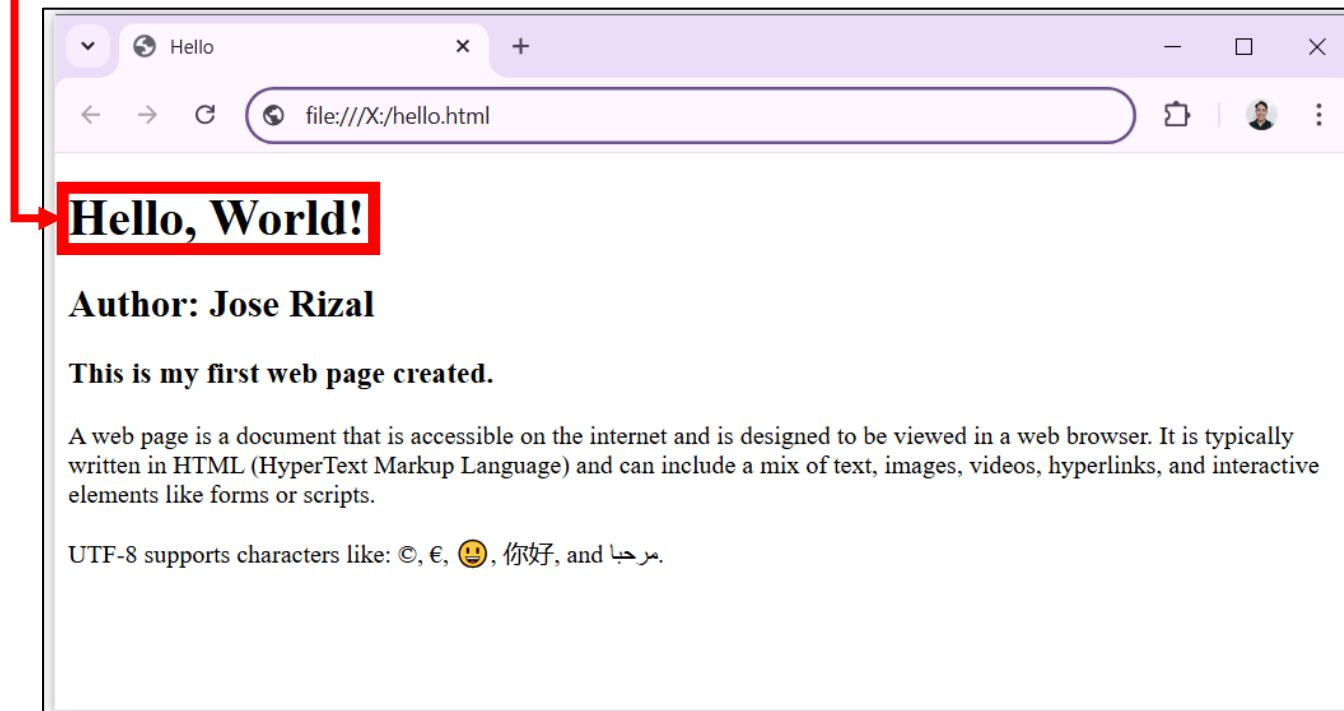
```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>7      </head>
8      <body>
9          <h1>Hello, World!</h1>
10         <h2>Author: Jose Rizal</h2>
11         <h3>This is my first web page created.</h3>
12         <p>
13             A web page is a document that is accessible on the internet and is designed to be viewed in
14             a web browser. It is typically written in HTML (HyperText Markup Language) and can include
15             a mix of text, images, videos,
16             hyperlinks, and interactive elements like forms
17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



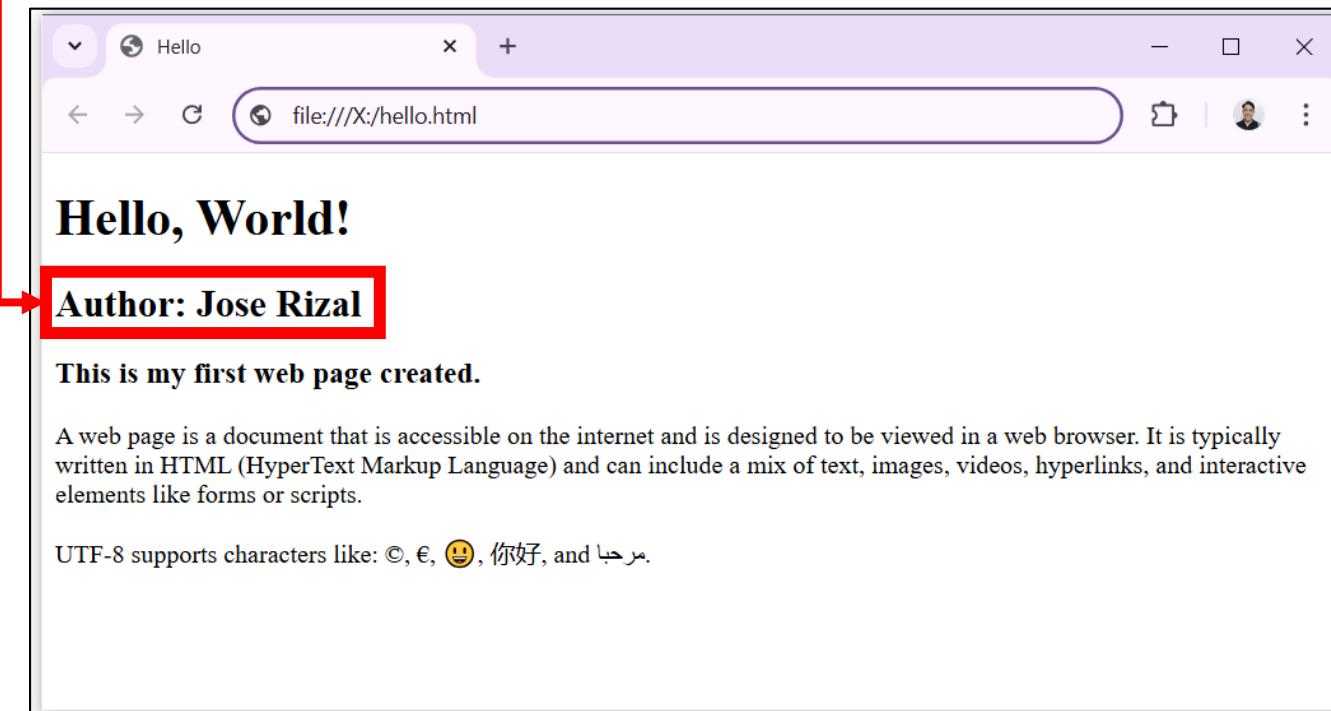
```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>Hello</title>
7   </head>
8   <body>
9     <h1>Hello, World!</h1>
10    <h2>Author: Jose Rizal</h2>
11    <h3>This is my first web page created.</h3>
12    <p>
13      A web page is a document that is accessible on the internet and is designed to be viewed in
14      a web browser. It is typically written in HTML (HyperText Markup Language) and can include
15      a mix of text, images, videos,
16      hyperlinks, and interactive elements like forms
17      or scripts.
18    </p>
19    <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20  </body>
21 </html>
```



```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>
7      </head>
8      <body>
9          <h1>Hello, World!</h1>
10         <h2>Author: Jose Rizal</h2>
11         <h3>This is my first web page created.</h3>
12         <p>
13             A web page is a document that is accessible on the internet and is designed to be viewed in
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15             a mix of text, images, videos,
16             hyperlinks, and interactive elements like forms
17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>
7      </head>
8      <body>
9          <h1>Hello, World!</h1>
10         <h2>Author: Jose Rizal</h2> // Line 10
11         <h3>This is my first web page created.</h3>
12         <p>
13             A web page is a document that is accessible on the internet and is designed to be viewed in
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15             a mix of text, images, videos,
16             hyperlinks, and interactive elements like forms
17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



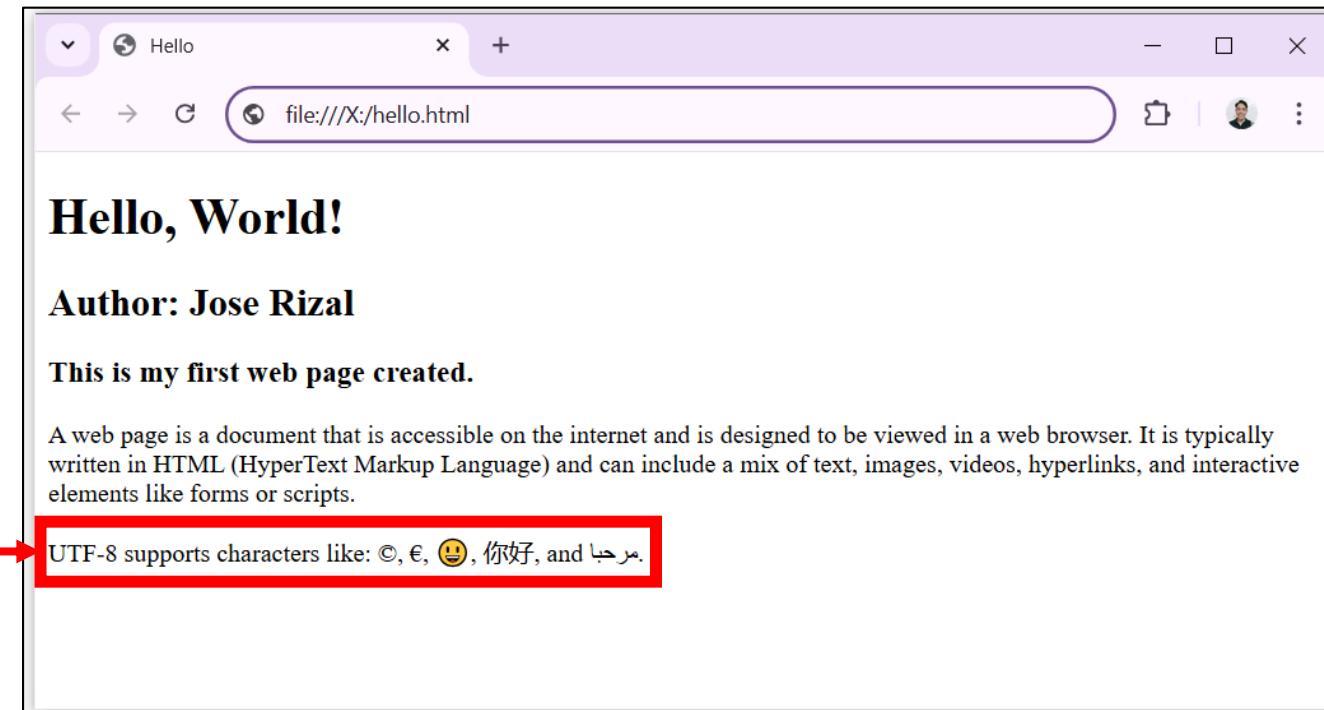
```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>
7      </head>
8      <body>
9          <h1>Hello, World!</h1>
10         <h2>Author: Jose Rizal</h2>
11         <h3>This is my first web page created.</h3>
12         <p>
13             A web page is a document that is accessible on the internet and is designed to be viewed in
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15             a mix of text, images, videos,
16             hyperlinks, and interactive elements like forms
17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>
7      </head>
8      <body>
9          <h1>Hello, World!</h1>
10         <h2>Author: Jose Rizal</h2>
11         <h3>This is my first web page created.</h3>
12         <p>
13             A web page is a document that is accessible on the internet and is designed to be viewed in
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17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, ☺, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



```
1  <!DOCTYPE html>
2  <html lang="en">
3      <head>
4          <meta charset="UTF-8">
5          <meta name="viewport" content="width=device-width, initial-scale=1.0">
6          <title>Hello</title>
7      </head>
8      <body>
9          <h1>Hello, World!</h1>
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15             a mix of text, images, videos,
16             hyperlinks, and interactive elements like forms
17             or scripts.
18         </p>
19         <p>UTF-8 supports characters like: ©, €, 😊, 你好, and مرحبا.</p>
20     </body>
21 </html>
```



Basic Tags

- **Heading** tags are used to create headers or sub header for your web page.
- The heading is created using the **<hn></hn>** tags. Then represents number from 1 to 6.
- The **<h1></h1>** represents the most important header, while the **<h6></h6>** is the least important.

Basic Tags (Heading)

<h1>Heading 1</h1>

Heading 1

<h2>Heading 2</h2>

Heading 2

<h3>Heading 3</h3>

Heading 3

<h4>Heading 4</h4>

Heading 4

<h5>Heading 5</h5>

Heading 5

<h6>Heading 6</h6>

Heading 6

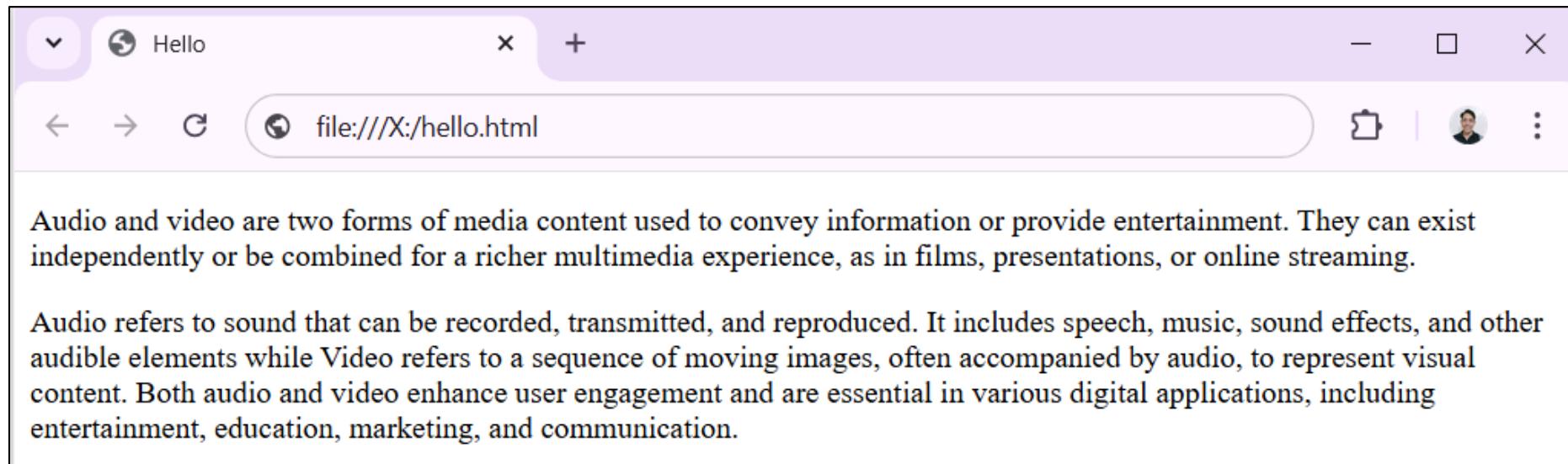
Basic Tags

- **Paragraph** tags are used to define a paragraph.
- Paragraph is defined using the `<p></p>` tags.

Basic Tags (Paragraph)

```
<p>
    Audio and video are two forms of media content used to convey information or provide entertainment.
    They can exist independently or be combined for a richer multimedia experience, as in films,
    presentations, or online streaming.
</p>
<p>
    Audio refers to sound that can be recorded, transmitted, and reproduced. It includes speech, music,
    sound effects, and other audible elements while Video refers to a sequence of moving images,
    often accompanied by audio, to represent visual content.

    Both audio and video enhance user engagement and are essential in various digital applications,
    including entertainment, education, marketing, and communication.
</p>
```



Basic Tags

- If you like to put the next string to the new line, we use the **line break tag**.
- To create a line break, use the **
** tag.
- Take note that this tag has no closing tag.

Basic Tags (Line Break)

```
<p>
    Audio refers to sound that can be recorded, transmitted, and reproduced. It includes speech, music,
    sound effects, and other audible elements while Video refers to a sequence of moving images,
    often accompanied by audio, to represent visual content.
    <br/>
    Both audio and video enhance user engagement and are essential in various digital applications,
    including entertainment, education, marketing, and communication.
</p>
```



Audio and video are two forms of media content used to convey information or provide entertainment. They can exist independently or be combined for a richer multimedia experience, as in films, presentations, or online streaming.

→ Audio refers to sound that can be recorded, transmitted, and reproduced. It includes speech, music, sound effects, and other audible elements while Video refers to a sequence of moving images, often accompanied by audio, to represent visual content.

Both audio and video enhance user engagement and are essential in various digital applications, including entertainment, education, marketing, and communication.

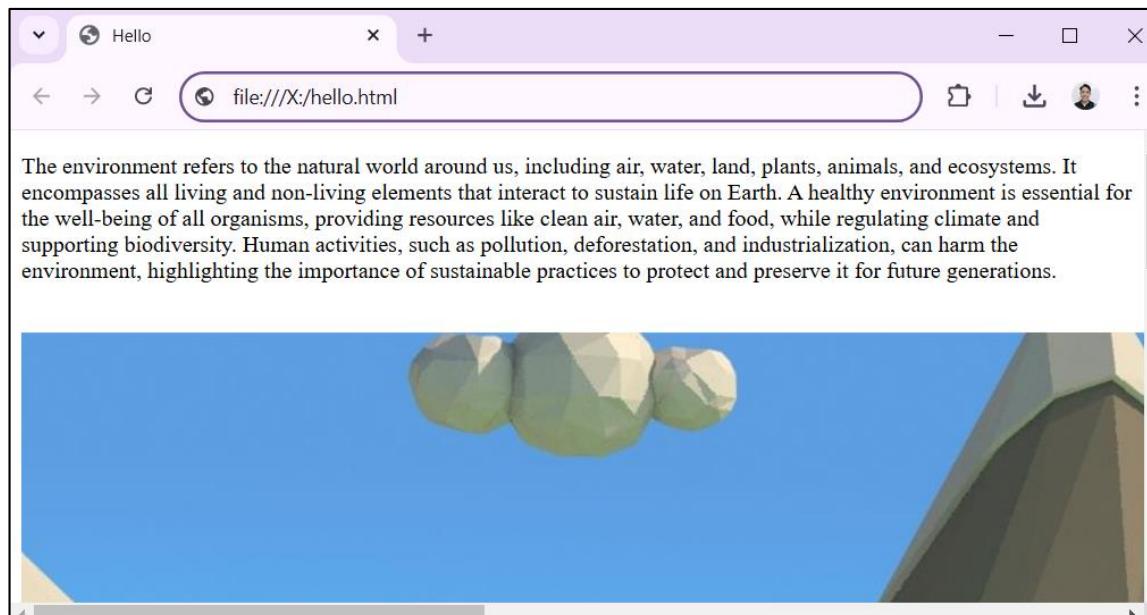
Basic Tags

- To insert images, use the `` tag.
- To use the `` tag, we need to set some attributes of the tag:
 - **src** – The path of the image file.
 - **alt** – The text that will be displayed when the image cannot be displayed.
 - **height** – The height of the image.
 - **width** – The width of the image.

Basic Tags (Image)

```
<p>
The environment refers to the natural world around us, including air, water, land, plants, animals,
and ecosystems. It encompasses all living and non-living elements that interact to sustain life on
Earth. A healthy environment is essential for the well-being of all organisms, providing resources
like clean air, water, and food, while regulating climate and supporting biodiversity. Human
activities, such as pollution, deforestation, and industrialization, can harm the environment,
highlighting the importance of sustainable practices to protect and preserve it for future
generations.
</p>
<br/>

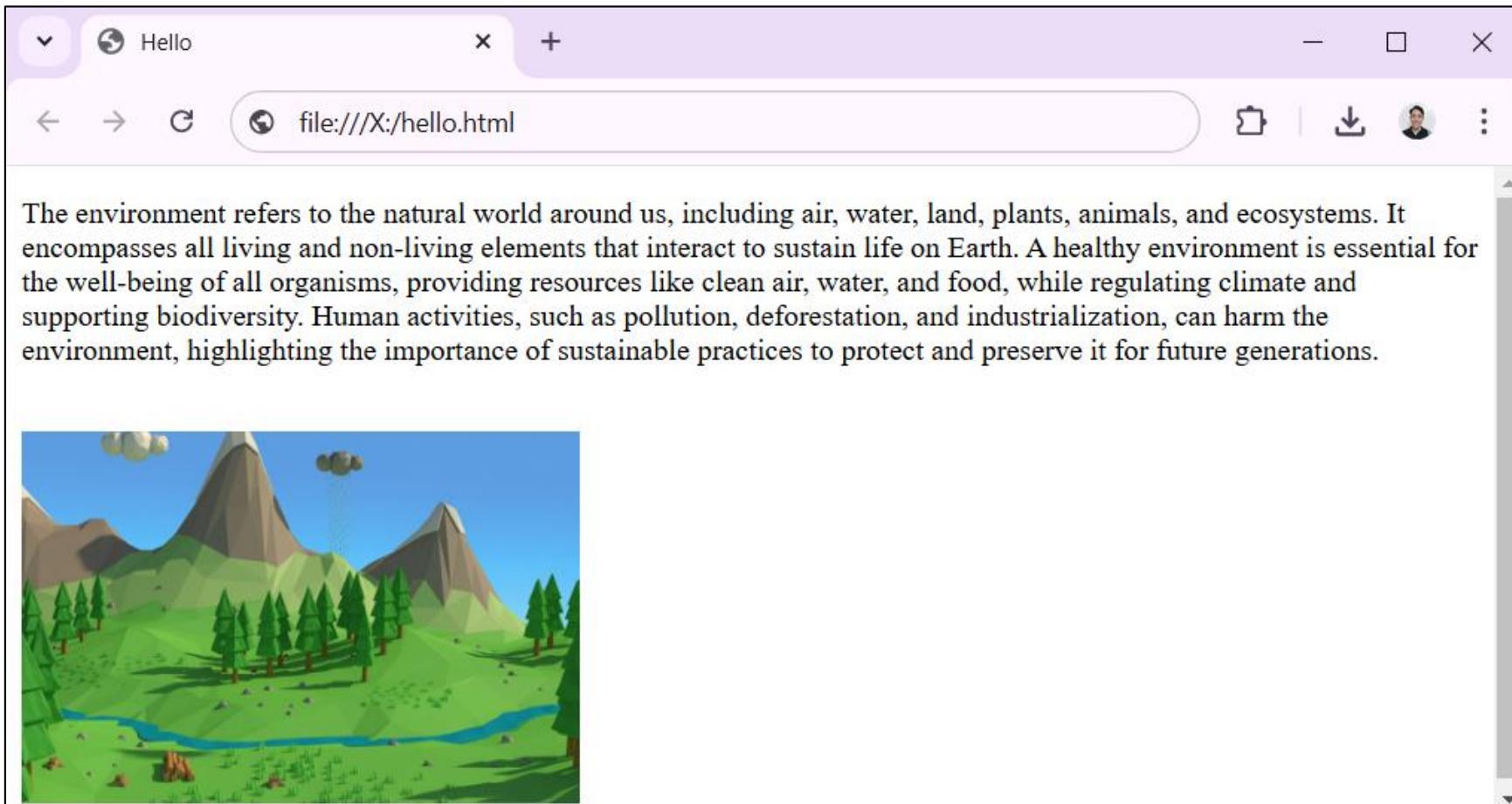
```



Basic Tags (Image with Attributes)

```

```



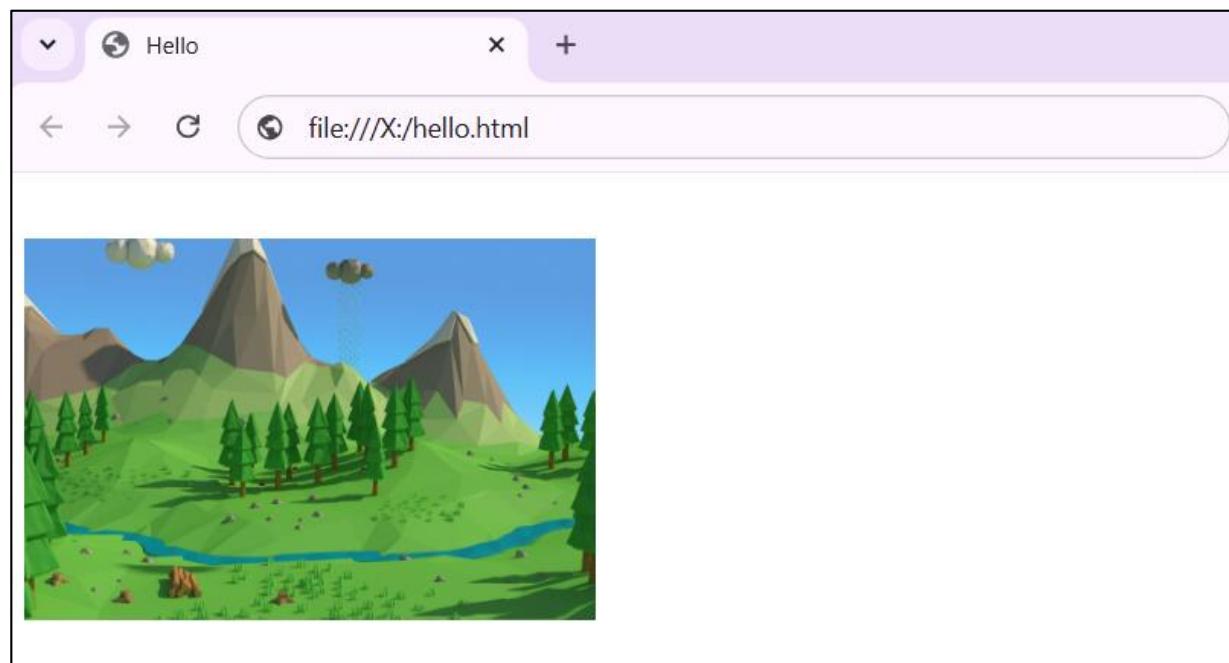
Basic Tags

- Comment tags are used to put comment inside the HTML page.
- Comments are not displayed by the browser.
- Text that is inside the `<!-- -->` tags are considered as comments.

Basic Tags (Comments)

```
<p>
    <!--The environment refers to the natural world around us, including air, water, land, plants, animals
        and ecosystems. It encompasses all living and non-living elements that interact to sustain life on
        Earth. A healthy environment is essential for the well-being of all organisms, providing resources
        like clean air, water, and food, while regulating climate and supporting biodiversity. Human
        activities, such as pollution, deforestation, and industrialization, can harm the environment,
        highlighting the importance of sustainable practices to protect and preserve it for future
        generations. -->
</p>
<br/>

```



Basic Tags

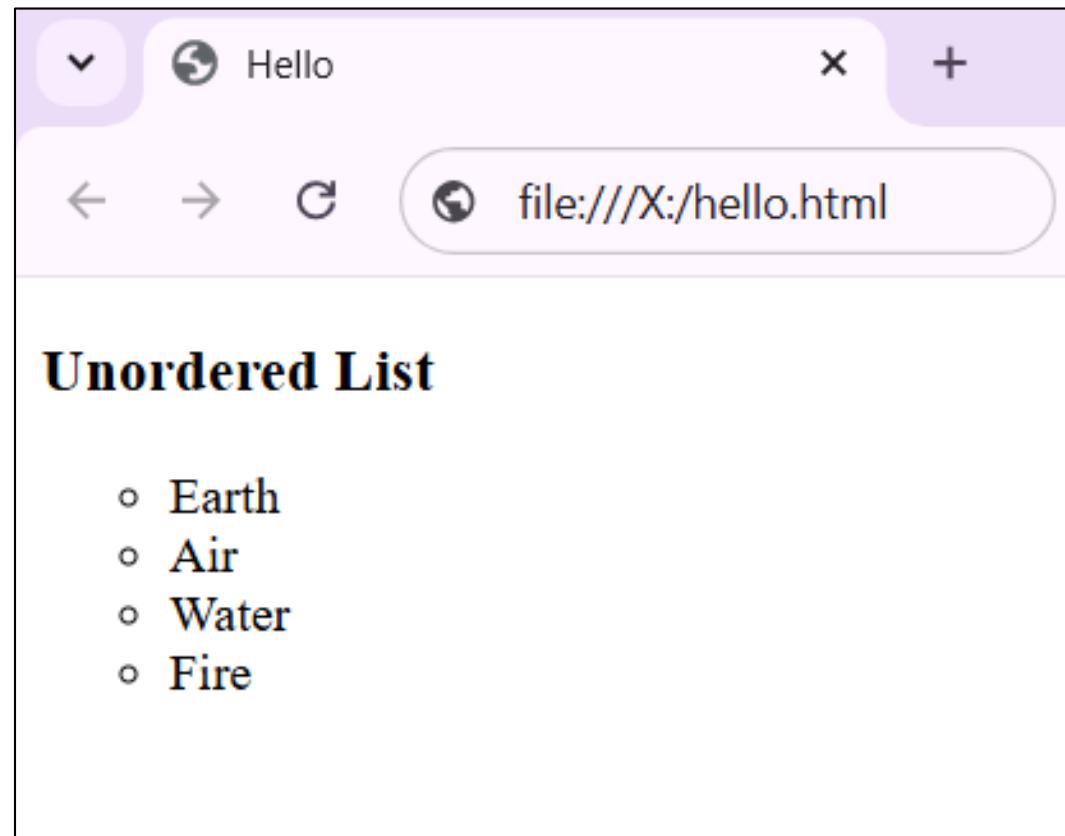
- List tag can be used to create **unordered list** or **ordered list**.
- **Unordered list** is used when the sequence is not important in the list.
- **Ordered list** uses numbers or letters to display the sequence of its list.

Basic Tags (Unordered List)

- Unordered list is created using the `` tags.
- Together with the list tag ``, it can create an unordered list.
- Take note that the `` tags should be inside the `` tags.
- The different bullet types are: **disc**, **circle**, and **square**.
Disc is the default bullet type.

Basic Tags (Unordered List)

```
<ul type="circle">
  <li>Earth</li>
  <li>Air</li>
  <li>Water</li>
  <li>Fire</li>
</ul>
```

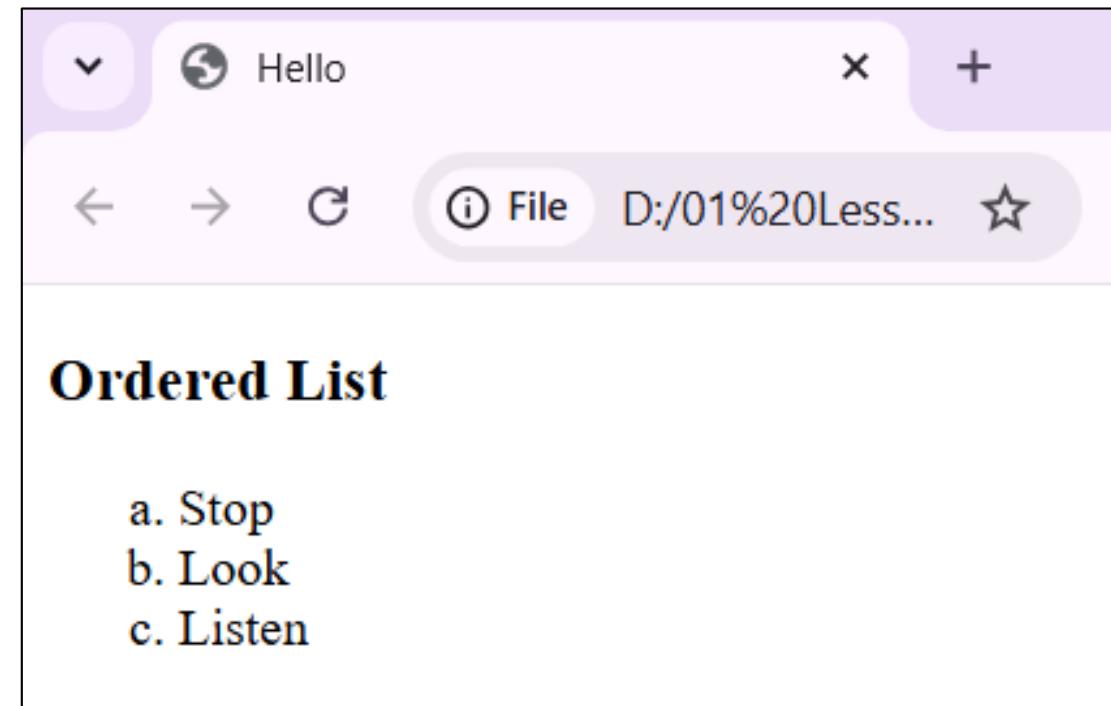


Basic Tags (Ordered List)

- Ordered list is created using the `` tags.
- It also use the `` tags to create each item in a list.
- The marker for each item can be set by changing the type attribute of the `` tag.
- The marker can be **number (1)**, **letters (A or a)** or **Roman numerals (I or i)**.
- **Number** is the default type

Basic Tags (Ordered List)

```
<ol type="a">
  <li>Stop</li>
  <li>Look</li>
  <li>Listen</li>
</ul>
```



Basic Tags

Creating **table** in a web page:

- **<table></table>** -To Create table.
- **<thead></thead>** -To group the header of the table.
- **<tbody></tbody>** -To group the content of the table.
- **<tr></tr>** -To create a new row in a table.
- **<th></th>** -To create the header cell. Table heading text is center-aligned and bold by default.
- **<td></td>** -To define the data cell of the table. Data text is left-aligned by default.

Basic Tags (Table)

```
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>City</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>New York</td>
    </tr>
    <tr>
      <td>Jane</td>
      <td>30</td>
      <td>London</td>
    </tr>
  </tbody>
</table>
```

A screenshot of a web browser window titled "Hello". The address bar shows "file:///X:/hello.html". The main content area displays a table with three columns: Name, Age, and City. There are two rows of data: John (25, New York) and Jane (30, London).

Name	Age	City
John	25	New York
Jane	30	London

Basic Tags (Table)

```
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>City</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>New York</td>
    </tr>
    <tr>
      <td>Jane</td>
      <td>30</td>
      <td>London</td>
    </tr>
  </tbody>
</table>
```

A screenshot of a web browser window titled "Hello". The address bar shows "file:///X:/hello.html". The browser displays a table with three columns: "Name", "Age", and "City". The first row contains "John", "25", and "New York". The second row contains "Jane", "30", and "London". The column headers are highlighted with a red box, and the entire row for "Jane" is also highlighted with a red box.

Name	Age	City
John	25	New York
Jane	30	London

Basic Tags (Table)

```
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>City</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>New York</td>
    </tr>
    <tr>
      <td>Jane</td>
      <td>30</td>
      <td>London</td>
    </tr>
  </tbody>
</table>
```



A screenshot of a web browser window titled "Hello". The address bar shows "file:///X:/hello.html". The page displays a table with three columns: Name, Age, and City. Two rows of data are shown, each with a red border around the entire row. A red arrow points from the yellow box in the code to the first row of the table.

Name	Age	City
John	25	New York
Jane	30	London

Basic Tags (Table)

```
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>City</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>New York</td>
    </tr>
    <tr>
      <td>Jane</td>
      <td>30</td>
      <td>London</td>
    </tr>
  </tbody>
</table>
```



A screenshot of a web browser window titled "Hello". The address bar shows "file:///X:/hello.html". The page displays a table with three columns: Name, Age, and City. The first row contains "John", "25", and "New York". The second row contains "Jane", "30", and "London". The row for "John" has a yellow border, and the entire row for "John" is highlighted with a red border. A red arrow points from the yellow box in the code to the yellow border in the browser.

Name	Age	City
John	25	New York
Jane	30	London

Basic Tags (Table)

```
<table>
  <thead>
    <tr>
      <th>Name</th>
      <th>Age</th>
      <th>City</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>John</td>
      <td>25</td>
      <td>New York</td>
    </tr>
    <tr>
      <td>Jane</td>
      <td>30</td>
      <td>London</td>
    </tr>
  </tbody>
</table>
```

The image shows a screenshot of a web browser window. The title bar says "Hello". The address bar shows "file:///X:/hello.html". The main content area displays a table with three columns: Name, Age, and City. There are two rows of data. The second row, which corresponds to the highlighted row in the code, is highlighted with a red border. A red arrow points from the highlighted row in the code to the corresponding row in the browser.

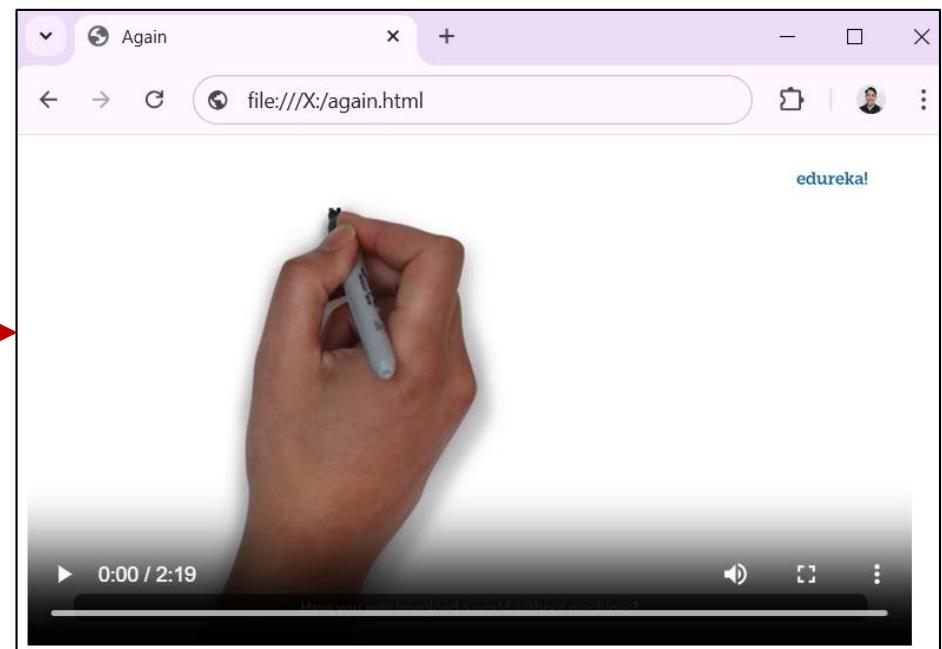
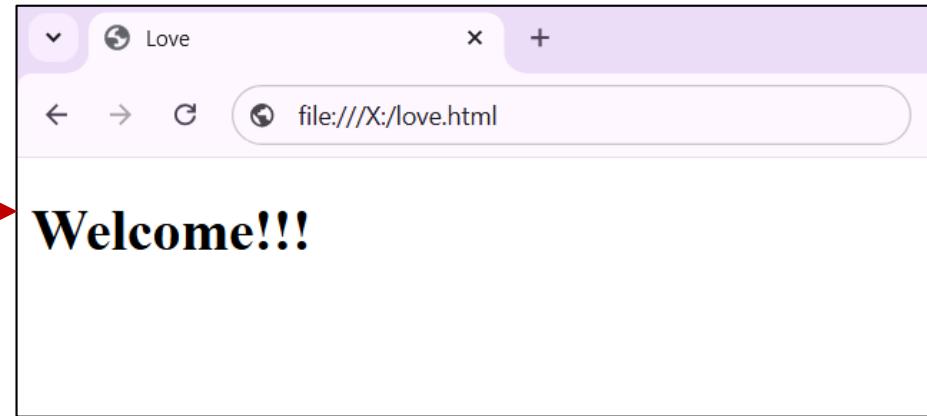
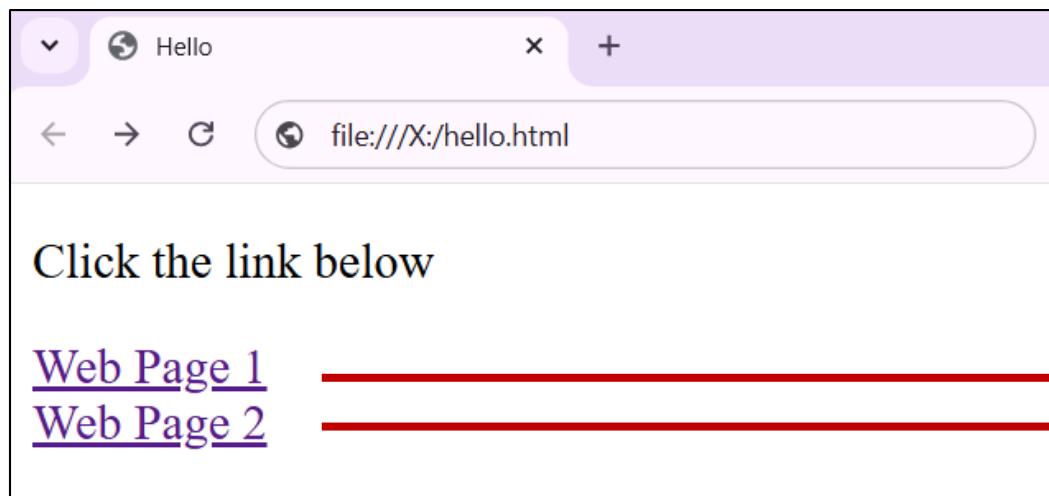
Name	Age	City
John	25	New York
Jane	30	London

Basic Tags

- Web documents can be interconnected to other web documents.
- It can create an object inside a web page that can be used to open another web page. This object is called the **hyperlink**.
- To create a hyperlink, we will use the `<a>` tags.
- **href** refers to the URL of a specified web document.

Basic Tags (Hyper Link)

```
<p>Click the link below</p>
<a href="love.html">Web Page 1</a>
<br />
<a href="again.html">Web Page 2</a>
```



CSS

- CSS defines HOW HTML elements are to be displayed.
- Styles are normally saved in external .css files.
- External style sheets enable one to change the appearance and layout of all the pages in a Web site just by editing a single file!
`<link rel="stylesheet" href="styles.css">`
- For internal CSS, it should be declare between `<style></style>` tag.

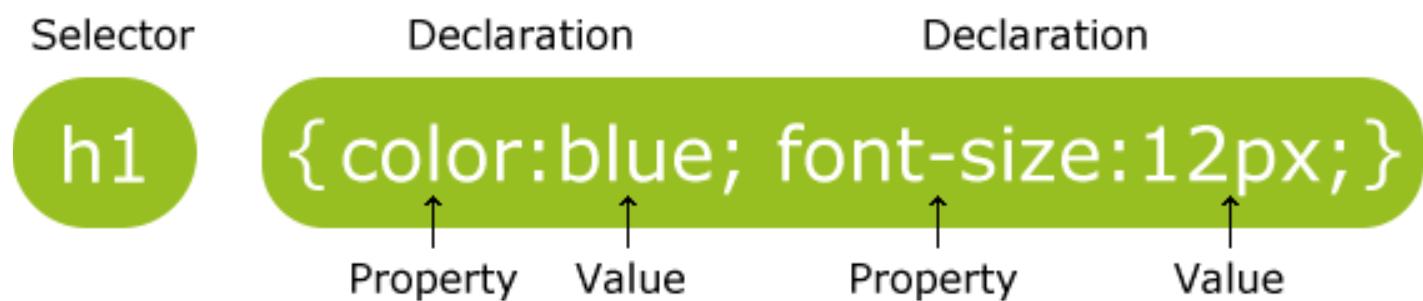
CSS Syntax

- A CSS rule has two main parts: a **selector**, and one or more **declarations**:
 - The selector is normally the **HTML element** that will be styled.
 - Each declaration consists of a **property** and a **value**. The property is the style attribute needs to be changed. Each property has a value.

CSS Selector

Three types of CSS Selectors

- Element
- Class
- ID



CSS Element Selector

- A CSS declaration always ends with a semicolon, and declaration groups are surrounded by curly brackets:

```
p {  
    color:red;  
    text-align:center;  
}
```

CSS ID Selector

- The id selector is used to specify a style for a single, unique element.
- The id selector uses the id attribute of the HTML element, and is defined with a "#".

```
<p id="welcome">Welcome to the wonderful world of HTML</p>
```

- Create a CSS rule with the id selector:

```
#welcome
{
    text-align:center; color:red;
}
```

CSS Class Selector

- The class selector is used to specify a style for a group of elements. Unlike the id selector, the class selector is most often used on several elements.
- This allows setting a particular style for many HTML elements with the same class.
- The class selector uses the HTML class attribute, and is defined with a "."

CSS Class Selector

- Within the body element of the html page, there is the following header element:

```
<h2 class="center">Summary</h2>
```

- Create a CSS rule with the class selector:

```
.center {text-align:center;}
```

- Additionally, there is the option for specifying HTML elements to be affected by a class.

```
p.center {text-align:center;}
```

INLINE CSS

- An inline style may be used to apply a unique style for a single element.
- To use inline *styles*, add the style attribute to the relevant element.
The style attribute can contain any CSS property.

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

<h1 style="color:blue;text-align:center;">This
is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

Output:



INTERNAL CSS

- An internal style sheet may be used if one single HTML page has a unique style.
- The internal style is defined inside the **<style> </style>** element, inside the head section.

```
<!DOCTYPE html>
<html>
<head>

<style>
body {
    background-color: linen;
}

h1 {
    color: maroon;
    margin-left: 40px;
}
</style>

</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Output:

External CSS

- With an external style sheet, you can change the look of an entire website by changing just one file.
- Each HTML page must include a reference to the external style sheet file inside the `<link>` element, inside the head section.

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>

<h1>This is a heading of Webpage 1</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="mystyle.css">
</head>
<body>

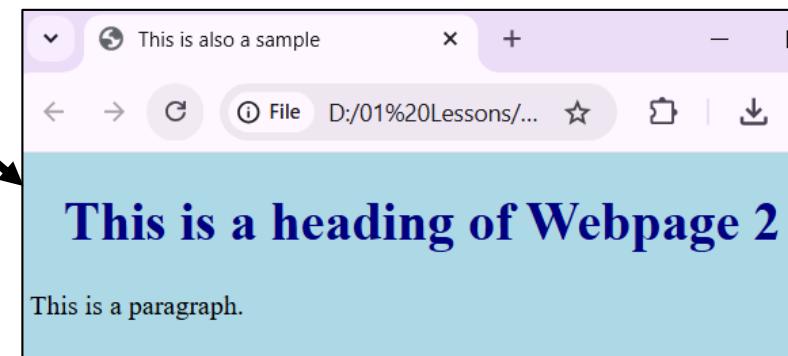
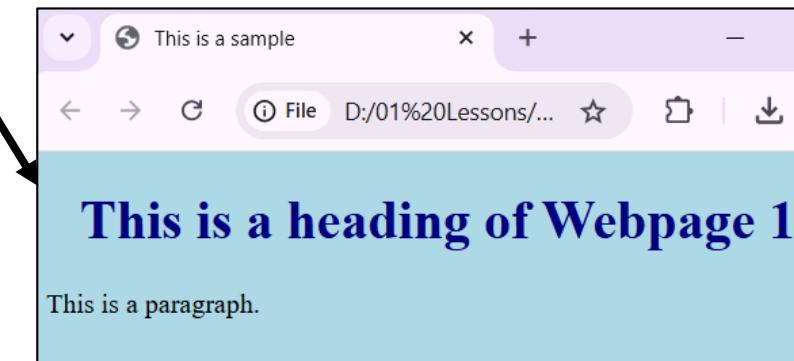
<h1>This is a heading of Webpage 2</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

File: mystyle.css

```
body {
    background-color: lightblue;
}

h1 {
    color: navy;
    margin-left: 20px;
}
```



HTML <div> Tag

- The <div> tag defines a division or a section in an HTML document.
- The <div> tag is used as a container for HTML elements
 - which is then styled with CSS or manipulated with JavaScript.
- The <div> tag is easily styled by using the class or id attribute.
- *Any sort of content can be put inside the <div> tag!*

A <div> section in a document that is styled with CSS:

```
<html>
  <head>
    <style>
      .myDiv {
        border: 5px outset red;
        background-color: lightblue;
        text-align: center;
      }
    </style>
  </head>

  <body>
    <div class="myDiv">
      <h2>This is a heading in a div element</h2>
      <p>This is some text in a div element.</p>
    </div>
  </body>
</html>
```

CSS Tags Reference

- <https://www.w3schools.com/cssref/index.php>
- <https://www.dofactory.com/css/ref>
- <http://web.simmons.edu/~grabiner/comm244/weekthree/css-basic-properties.html>