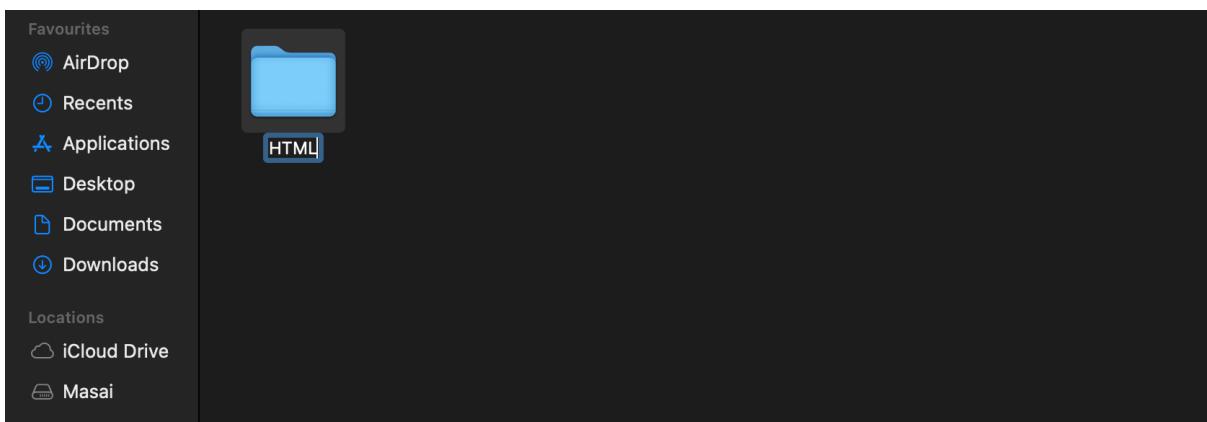




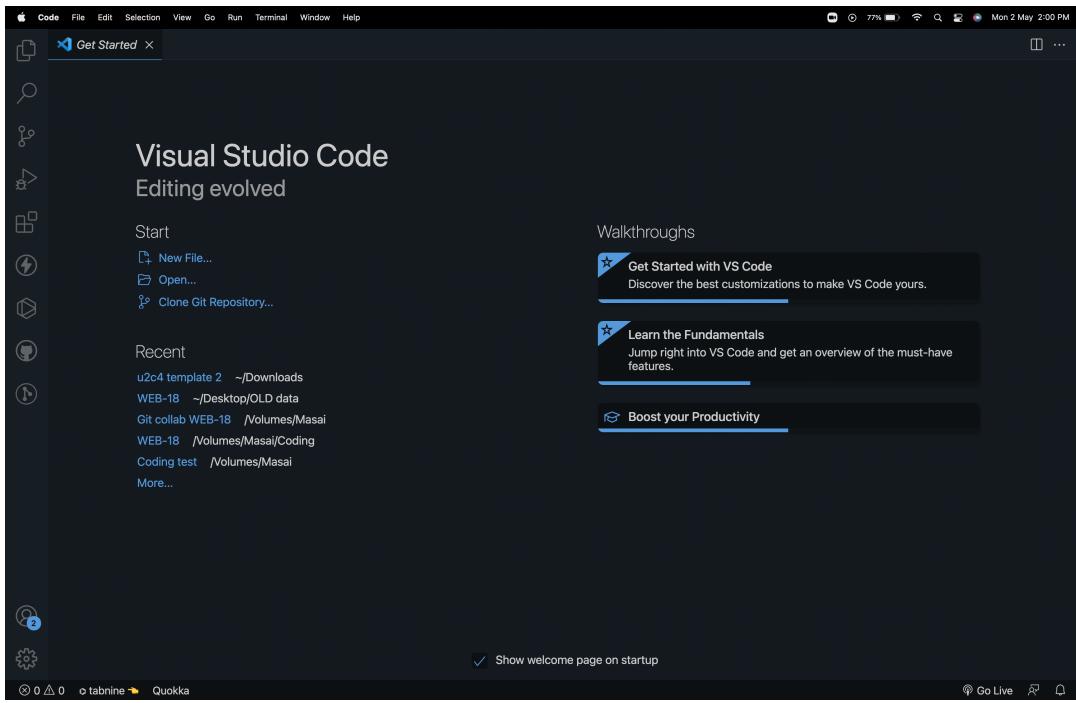
## Day 1: Introduction to HTML

### Creating your first HTML file

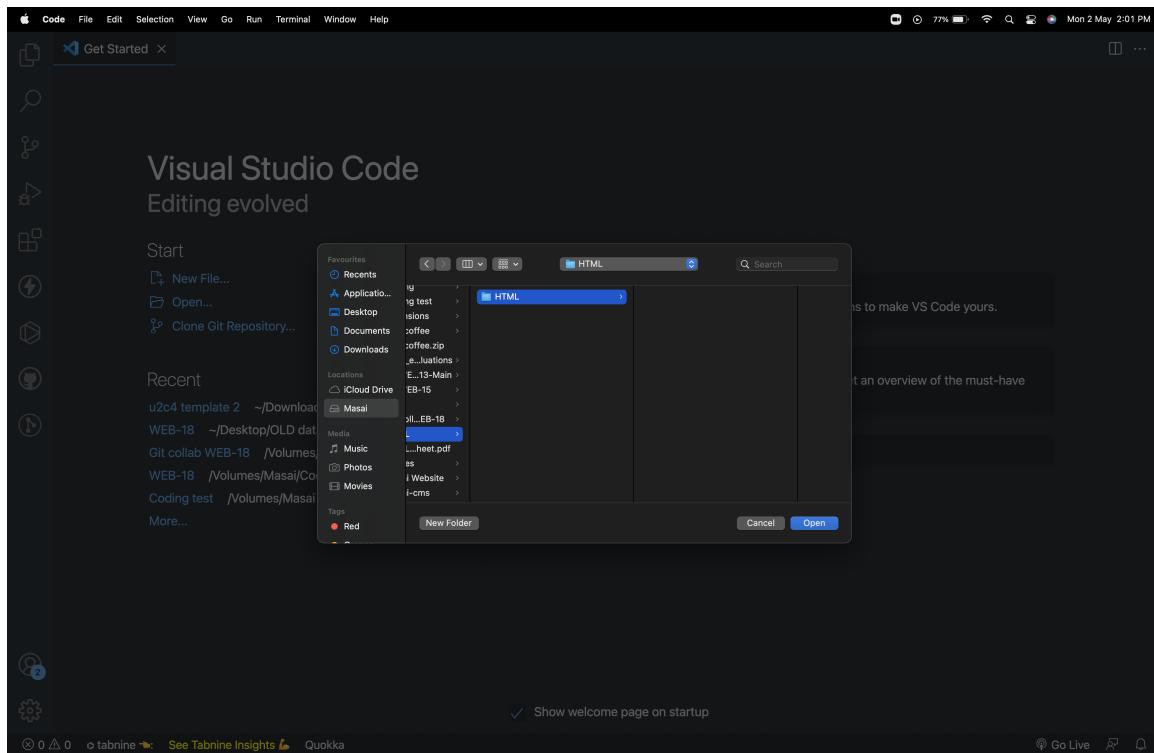
- Create a folder in your local system with any names of your choice



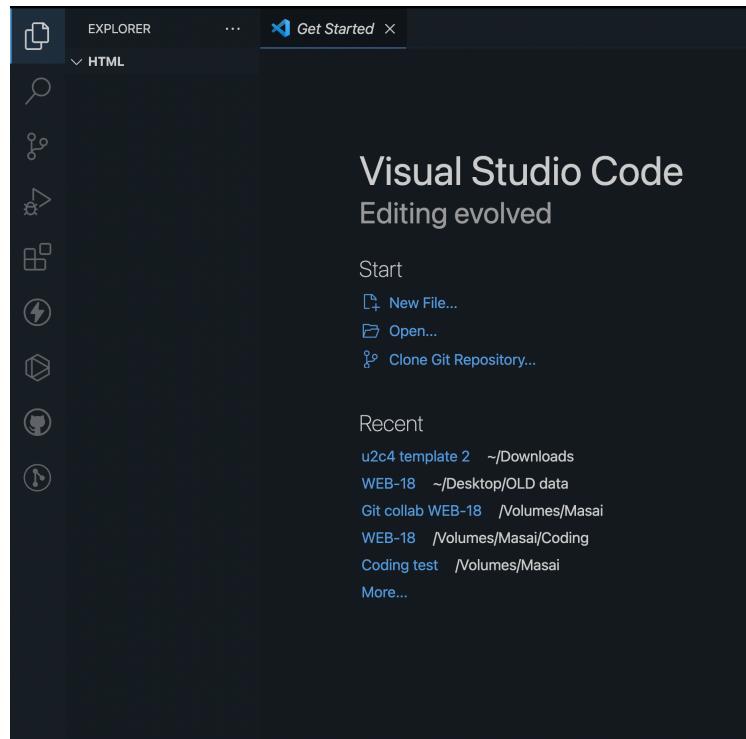
- Open VS code



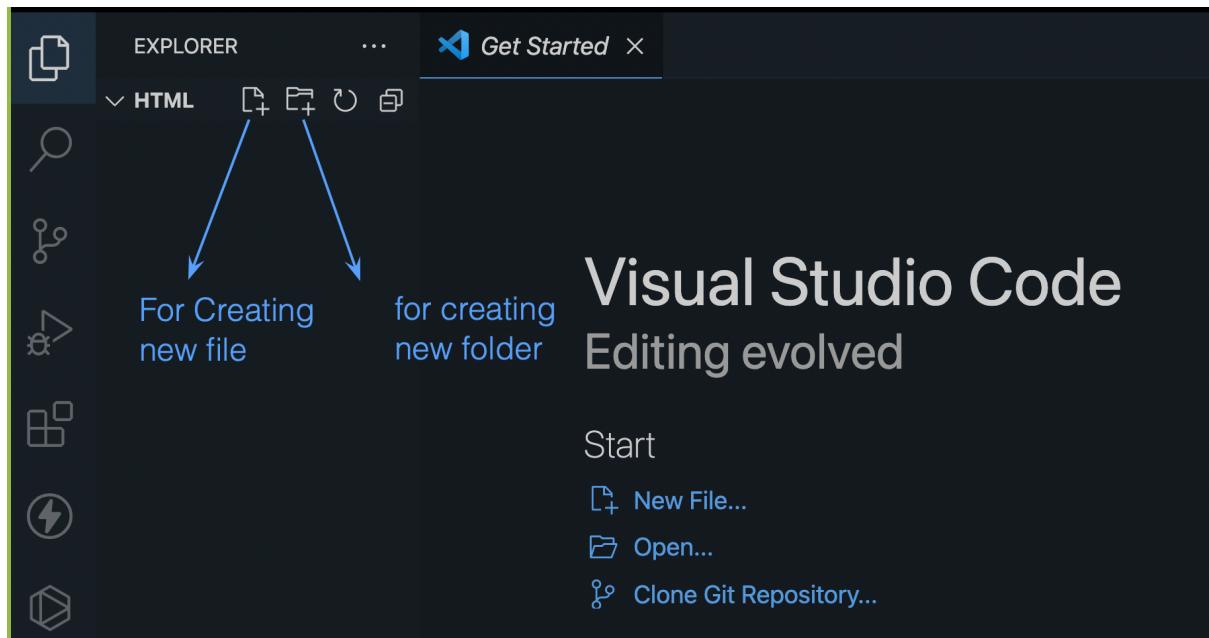
- Click on Open and go to your directory where you have created your folder and open that folder, in my case it is HTML folder



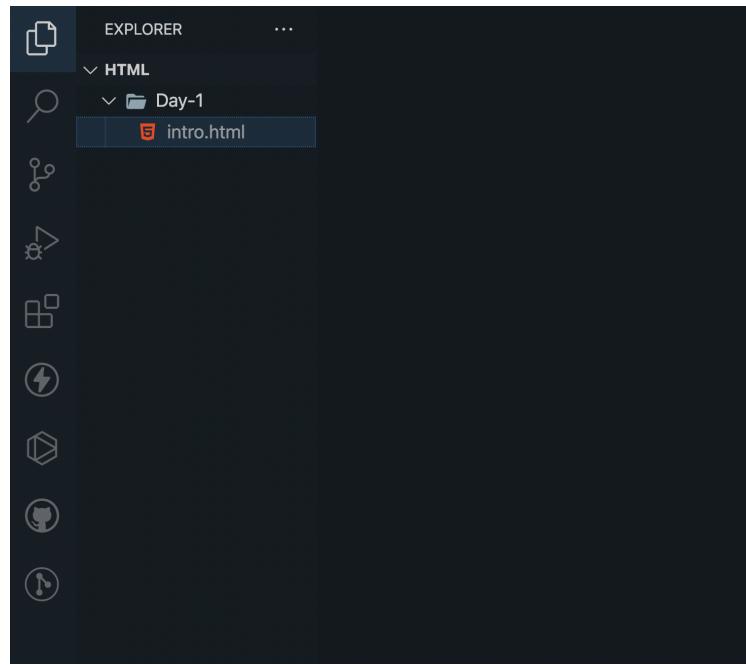
- Click on Open and now you are in HTML folder



- Now you can create files and folders



- Now I will create a folder called Day-1, inside Day-1 I will add a file called intro.html



- Your HTML file is now ready for coding. Happy Coding 😊

## History of HTML

- HTML was created by **Sir Tim Berners-Lee in late 1991**.
- Before he created HTML, he used to send research documents via email.
- To make it easier for scientists at different universities to gain access to each other's documents, he created HTML.

## Why has HTML become so popular and why not MS docs

- User-friendly
- Very lightweight
- Easy to learn
- Easy to integrate with all browsers

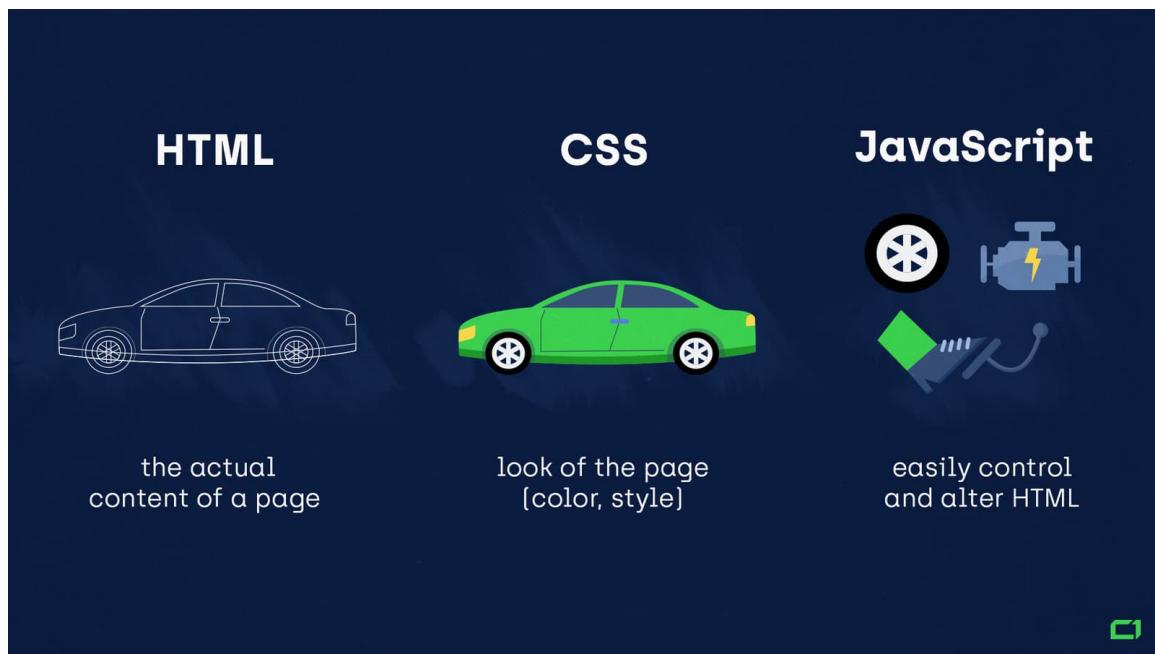
## So is HTML a programming language or not?



- Think of it this way: you can't compute the sum of  $2 + 2$  in HTML; that's not what it's for. This is because HTML is not a programming language.

## Overview of HTML

- Let's take analogy of car with HTML
  - Car body : Structure of HTML
  - Car color : Styling (CSS)
  - Gears, breaks : Functionality (JS)



## HTML Elements

The three main parts of the HTML elements are:

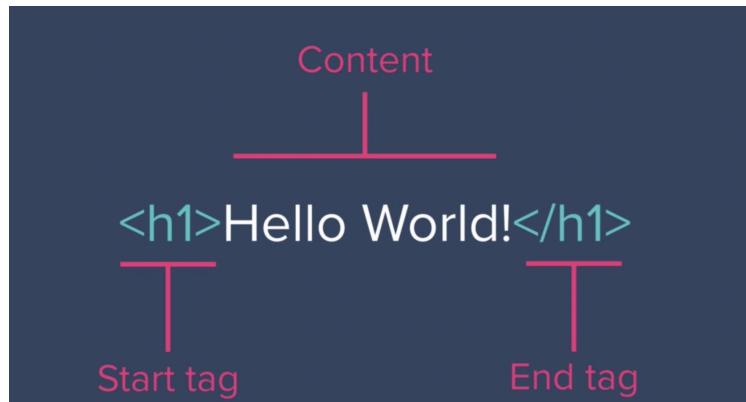
- Opening Tag : It marks the start of the element.
- Content : The contents that is visible on the browser
- Closing Tag : It marks the end of the element. Usually it starts with a backward slash '/'

### Syntax :

```
<opening tag> Content </closing tag>
```

### Example :

```
<h1> Hello World! </h1>
```



## HTML Page Structure

You are one step away from building your first website in HTML. You need to add `<html>`, `<head>`, `<title>` and `<body>` tags to successfully build your website. Let's see what each tag means:

- The `<!DOCTYPE html>` declaration defines the version of HTML document, in this case it is 5
- The `<html>` element is the root element of an HTML page
- The `<head>` element contains meta information about the HTML page
- The `<title>` element specifies a title for the HTML page.
- The `<body>` element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The `<h1>`, `<h2>` element defines a headings.

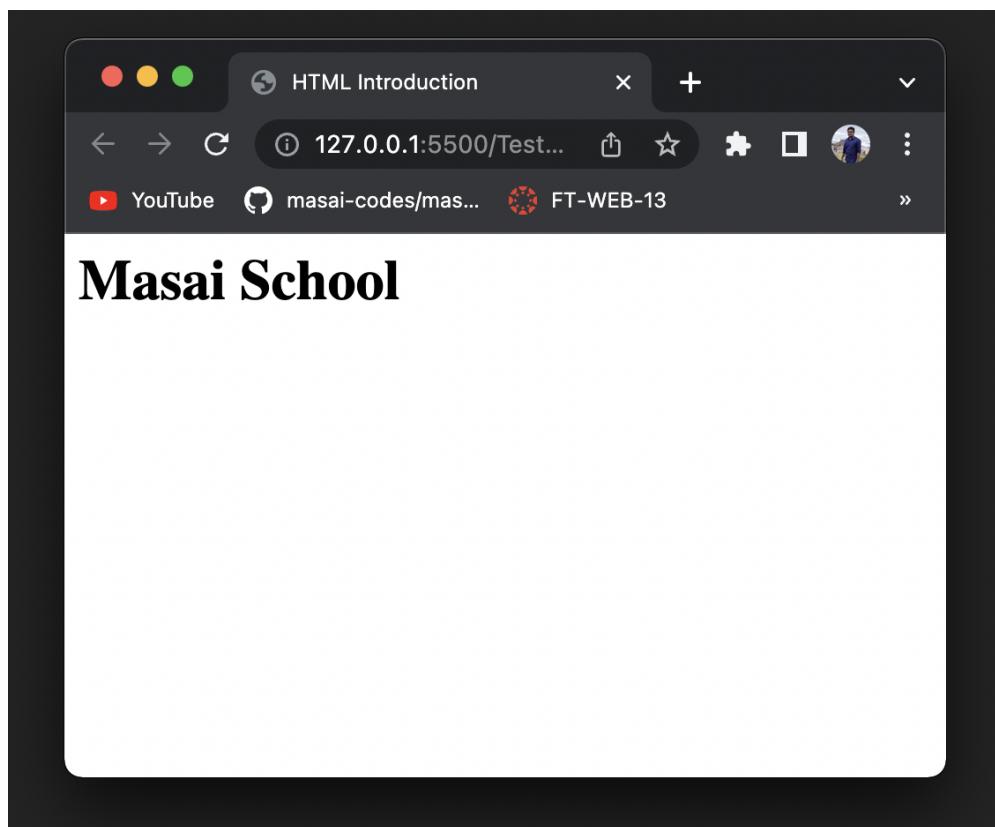
```
<html>
  <head>
```

```
<title> HTML Introduction </title>
</head>
<body>
    <h1>Masai School</h1>
</body>
</html>
```

### Explanation:

- The `<html>` element contains all the contents of the webpage.
- The `<head>` element contains additional information about the HTML page like the page title.
- The `<title>` element specifies a title for the webpage which is shown in the browser's window. **HTML Introduction** title will be shown on the browser's title bar.
- The `<body>` element contains all the contents of the webpage like the heading and the paragraph.
- The `<h1>` element specifies a heading

And finally your website looks like this!



## HTML Headings

- HTML headings are defined with the `<h1>` to `<h6>` tags.
- `<h1>` defines the most important heading. `<h6>` defines the least important heading:

## Example

```
<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>
```

Read more:[https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading\\_Elements](https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading_Elements)

## HTML Paragraphs

HTML paragraphs are defined with the `<p>` tag:

## Example

```
<p> Welcome to Masai School.</p>
```

Read more:<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/p>

## Empty HTML Elements

HTML elements with no content are called empty elements.

The `<br>` tag defines a line break, and is an empty element without a closing tag:

## Example

```
<p>This is a <br> paragraph with a line break.</p>
```

For instance, the horizontal ruling tag `<hr>` is an Empty HTML tag.

## Syntax

```
<hr>
```

## Attributes

- It is basically additional features, take an example of mobile and ask attributes of mobile for eg: battery, camera, ram, rom etc.
- Each and every tag in HTML will have some attributes (additional features)



## Anchor Tag



- The above example is the anchor which connects the ship to the shore
- Similarly, an anchor tag connects one website to other websites using an anchor tag - [codepen](#)

- The `<a>` tag is used to add external or internal links as content in your HTML document.
- You could also include external links to other websites in your HTML document. Here's an example that demonstrates this:

```
<a href="www.google.com">Visit Google</a>
```

- Above code will redirect you to `google.com` in same page, if you want to redirect to new blank page you should add an attribute known as target.
- `target="_blank"` will open your page in new tab

```
<a target="_blank" href="www.google.com">Visit Google</a>
```

## HTML Input

- So far we have found a great way of formatting whatever we want to share. This worked great for the scientific community to share their documents. But as HTML grew in popularity, it started getting used for a lot of other applications like filling online applications, online voting, etc.... . Now these applications needed user input! How do we do that?
- Take example of form which they generally fill online before joining masai

The image shows a 'Sign Up' form from the Masai School website. The form is titled 'Sign Up' and contains three input fields: 'Full name', 'Email', and 'Password'. Below these fields is a small text area stating: 'By signing up, I accept the Masai School [Terms of Service](#) and acknowledge the [Privacy Policy](#)'. At the bottom of the form is a large 'SIGN UP' button. Below the button, there is a link 'Already have an account? [Sign In](#)'.

- Different input tags

```
<input type="text"/> (default value)
<input type="button"/>
<input type="checkbox"/>
```

```
<input type="color"/>
<input type="date"/>
<input type="datetime-local"/>
<input type="email"/>
<input type="file"/>
<input type="hidden"/>
<input type="image"/>
<input type="month"/>
<input type="number"/>
<input type="password"/>
<input type="radio"/>
<input type="range"/>
<input type="reset"/>
<input type="search"/>
<input type="submit"/>
<input type="tel"/>
<input type="time"/>
<input type="url"/>
<input type="week"/>
```

## HTML List Tags

Lists are used quite often in websites to display a set of data or items in an ordered or unordered fashion.

HTML provides us with three types of list tags:

- Unordered List
- Ordered List

Let's learn a bit about each of these.

### Unordered List

```
<ul>
<li>Hollywood</li>
<li>Bollywood</li>
<li>Tollywood</li>
</ul>
```

Output:

```
2
3    <ul>
4        <li>Hollywood</li>
5        <li>Bollywood</li>
6        <li>Tollywood</li>
7    </ul>
8
```

- Hollywood
- Bollywood
- Tollywood

## Ordered List

```
<ol>
<li>Hollywood</li>
<li>Bollywood</li>
<li>Tollywood</li>
</ol>
```

Output:

```
3    <ol>
4        <li>Hollywood</li>
5        <li>Bollywood</li>
6        <li>Tollywood</li>
7    </ol>
8
```

1. Hollywood
2. Bollywood
3. Tollywood

- For nested list refer to this [codepen](#)
- To know more about type attribute read this <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ul>

## HTML Image tag

- Have you ever wondered how images in websites



# HTML IMAGE TAG

```

```

Tag  
Name

Attribute  
Name

Attribute  
Value

Attribute  
Name

Attribute  
Value

- The `<img>` tag in HTML is used to output or render images on the webpage. It specifies the source of the image using the `src` attribute as shown below:

```

```

The above would render the image specified inside the `src` attribute:

```
1 
```



## HTML Tables:

- Basic Excel sheet

S.No	Name	English	Maths	Science
1	Nrupul	100	100	100
2	Prateek	100	100	100
3	Aman	100	100	100
4	Albert	100	100	100

The `<table>` tag defines an HTML table.

An HTML table consists of one `<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.

Codepen Link : <https://codepen.io/vchandu111/pen/qBVbdQO>

**Read more:**

- [Table](#)
- [Table Head](#)
- [Table Body](#)
- [TH](#)
- [TR](#)

- [TD](#)

## Other Important essential tags:

Aa Tag Name	Description
<u>&lt;!DOCTYPE&gt;</u>	This tag is used to specify the version of HTML
<u>&lt;html&gt;</u>	represents the root of an HTML document
<u>&lt;a&gt;</u>	It is termed as anchor tag and it creates a hyperlink or link.
<u>&lt;b&gt;</u>	It is used to make a text bold.
<u>&lt;body&gt;</u>	It is used to define the body section of an HTML document.
<u>&lt;br&gt;</u>	It is used to apply single line break.
<u>&lt;button&gt;</u>	It is used to represent a clickable button
<u>&lt;div&gt;</u>	It defines a division or section within HTML document.
<u>&lt;form&gt;</u>	It is used to define an HTML form.
<u>&lt;h1&gt; to &lt;h6&gt;</u>	It defines headings for an HTML document from level 1 to level 6.
<u>&lt;head&gt;</u>	It defines the head section of an HTML document.
<u>&lt;hr&gt;</u>	It is used to apply thematic break between paragraph-level elements.
<u>&lt;img&gt;</u>	It is used to insert an image within an HTML document.
<u>&lt;input&gt;</u>	It defines an input field within an HTML form.
<u>&lt;label&gt;</u>	It defines a text label for the input field of form.
<u>&lt;li&gt;</u>	It is used to represent items in list.
<u>&lt;link&gt;</u>	It represents a relationship between current document and an external resource.
<u>&lt;meta&gt;</u>	It defines metadata of an HTML document.
<u>&lt;option&gt;</u>	It is used to define options or items in a drop-down list.
<u>&lt;p&gt;</u>	It represents a paragraph in an HTML document.
<u>&lt;script&gt;</u>	It is used to declare the JavaScript within HTML document.
<u>&lt;select&gt;</u>	It represents a control which provides a menu of options.
<u>&lt;small&gt;</u>	It is used to make text font one size smaller than document's base font size.
<u>&lt;span&gt;</u>	It is used for styling and grouping inline.
<u>&lt;style&gt;</u>	It is used to contain style information for an HTML document.

Aa Tag Name	Description
<u>&lt;table&gt;</u>	It is used to present data in tabular form or to create a table within HTML document.
<u>&lt;tbody&gt;</u>	It represents the body content of an HTML table and used along with <thead> and <tfoot>.
<u>&lt;td&gt;</u>	It is used to define cells of an HTML table which contains table data
<u>&lt;textarea&gt;</u>	It is used to define multiple line input such as comment feedback and review etc.
<u>&lt;tfoot&gt;</u>	It defines the footer content of an HTML table.
<u>&lt;th&gt;</u>	It defines the head cell of an HTML table.
<u>&lt;thead&gt;</u>	It defines the header of an HTML table. It is used along with <tbody> and <tfoot> tags.
<u>&lt;title&gt;</u>	It defines the title or name of an HTML document.
<u>&lt;tr&gt;</u>	It defines the row cells in an HTML table
<u>&lt;u&gt;</u>	It is used to render enclosed text with an underline.
<u>&lt;ul&gt;</u>	It defines unordered list of items.