

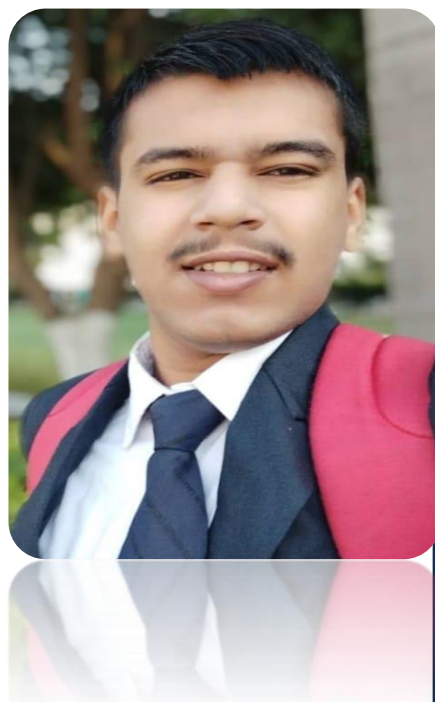
2024

HTML

By: Jayant

Why Choose This book?

- Good Quality Content
- Easy to Understand
- Images and colors are used for increase performance
- highlight important points for students



HTML



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Q-What is HTML?

Ans: (i) HTML Stands for Hyper Text Markup Language. It's written by Tim's Berners Lee in 1990.

(ii) It is a markup language for making different webpages.

(iii) HTML compatible with CSS or JS because CSS or JS gives designing and logic part of the Webpage.

(iv) HTML use different tags for performing different tasks in HTML.

(v) HTML is a User-friendly language because it not raised errors during execution of code.

(vi) HTML is **Frontend** based language it's not handle the **backend** part.

Q-Features of HTML?

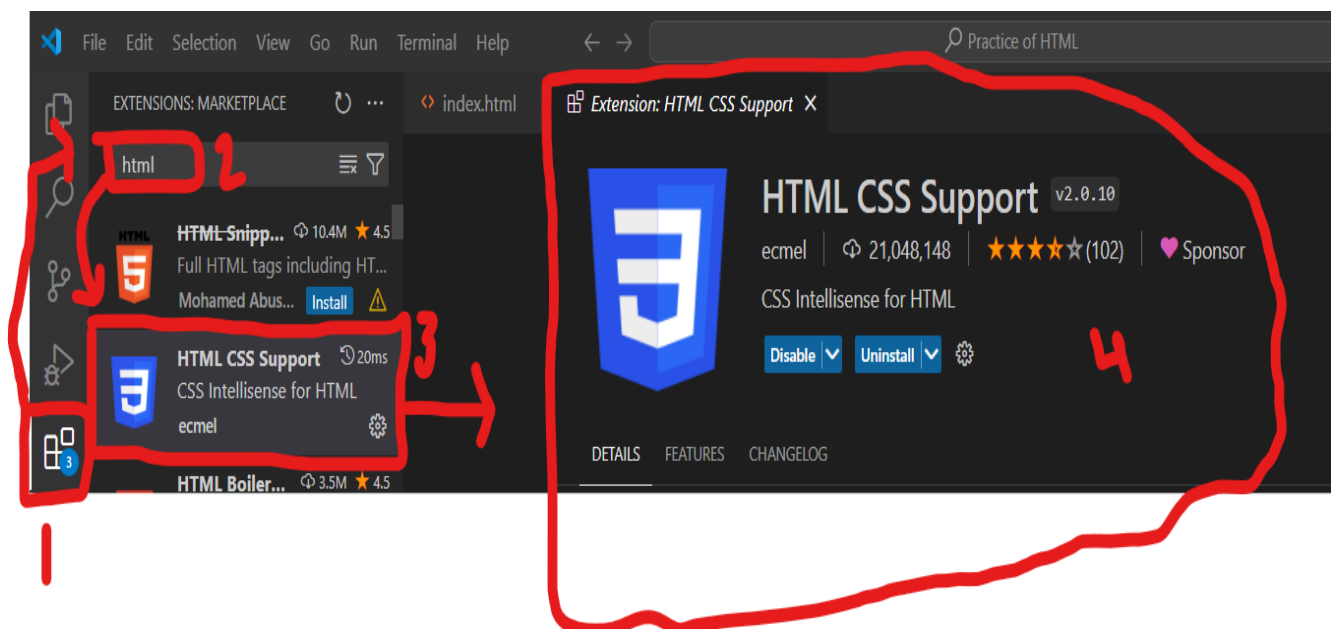
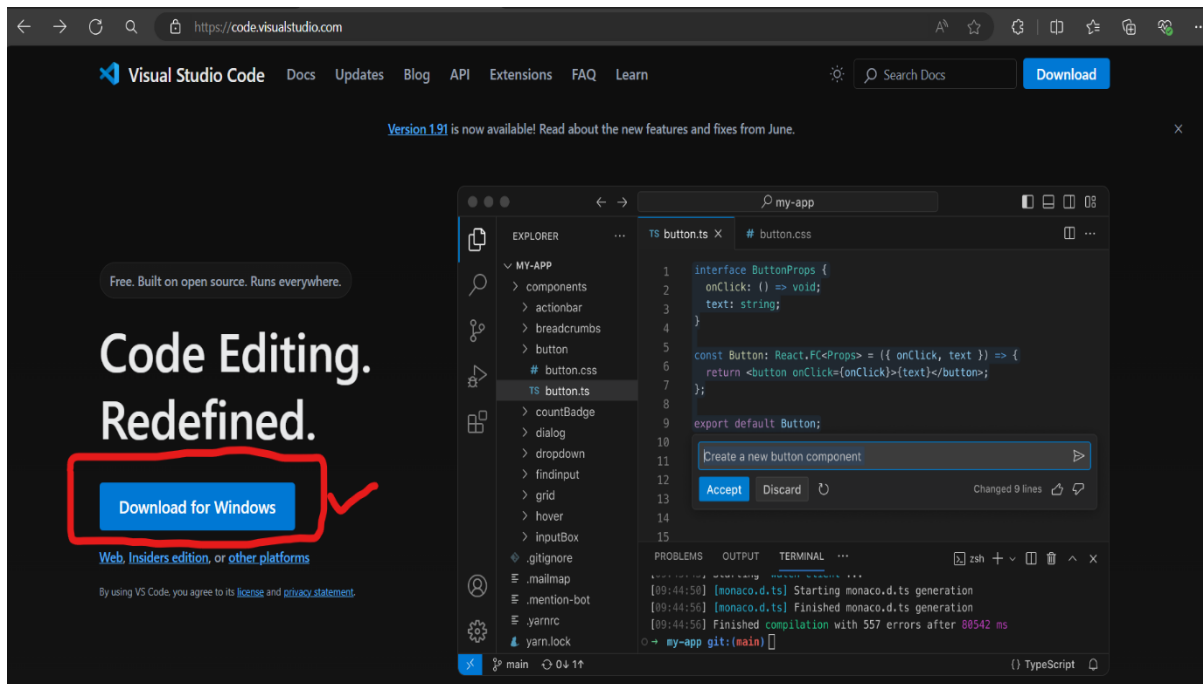
Ans: (i) **Easy to Use:** The syntax of HTML is very simple and easy to use different tags in HTML.

(ii) **Error Free:** HTML is not a case sensitive language as well as it's not raised error because it is not a programming language it's just a markup language.

(iii) **Compatible with almost all OS (operating Systems):** HTML is compatible with all operating systems because no need to install any type of HTML files or a extension, but use of html with different ide's so maybe used different extensions but if you used simple text editor like **notepad** so no need to download or install any dependencies for HTML.

(iv) **Work with other languages:** HTML work with CSS or Javascript for given more functionality to webpage. HTML also support PHP language.

Setup HTML in Visual Studio Code



Step1: Download and Install VS Code from official Website of VS Code.

Link is: [Visual Studio Code - Code Editing. Redefined](#)

Step2: After installation go to Extension symbol.

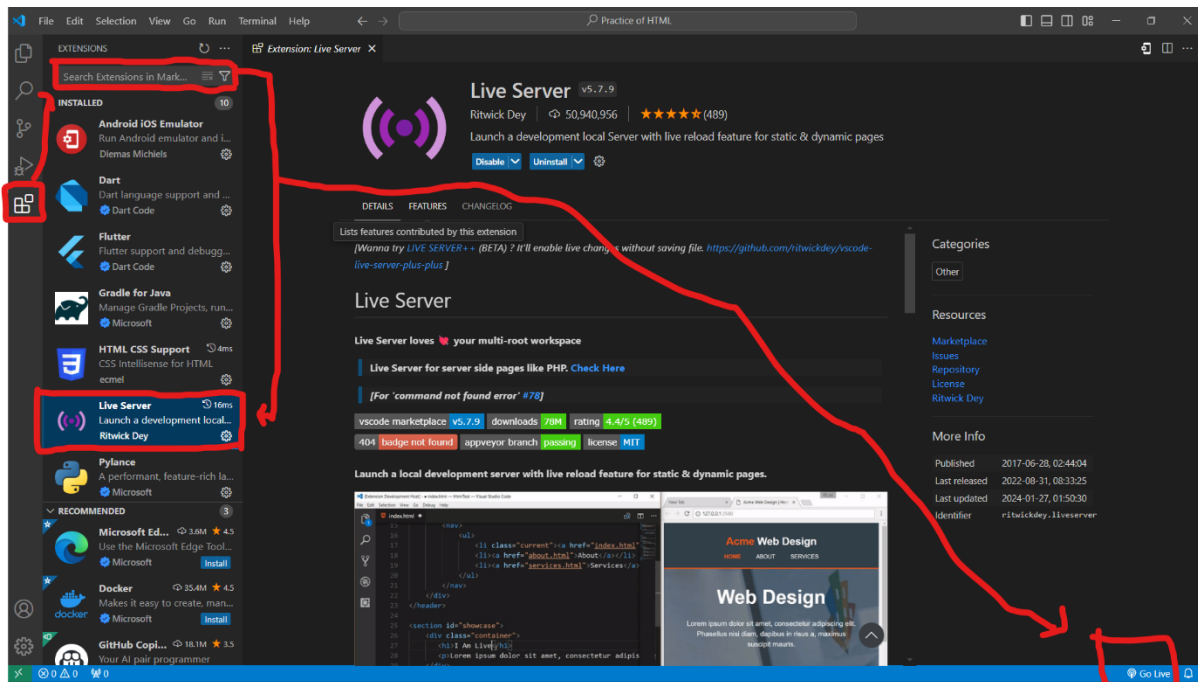
Step3: Search [HTML CSS Support](#).

Step4: Click the [HTML CSS Support](#).

Step5: Click [install](#) button shown right side on vs code.

Step6: After installation of extension make [index.html](#) file for usage of HTML.

Setup Live Server in VS Code



Q-What is Live Server?

Ans: Live server is an extension of Visual Studio Code (VS Code). It is not a compulsory extension for installation in vs code; But user want to refresh webpage automatically then use live server extension. It's save the time of developer for checking output of HTML code again and again during development.

Installation Steps of Live Server:

Step1: Open VS-Code and go to Extensions.

Step2: Search **Live server**.

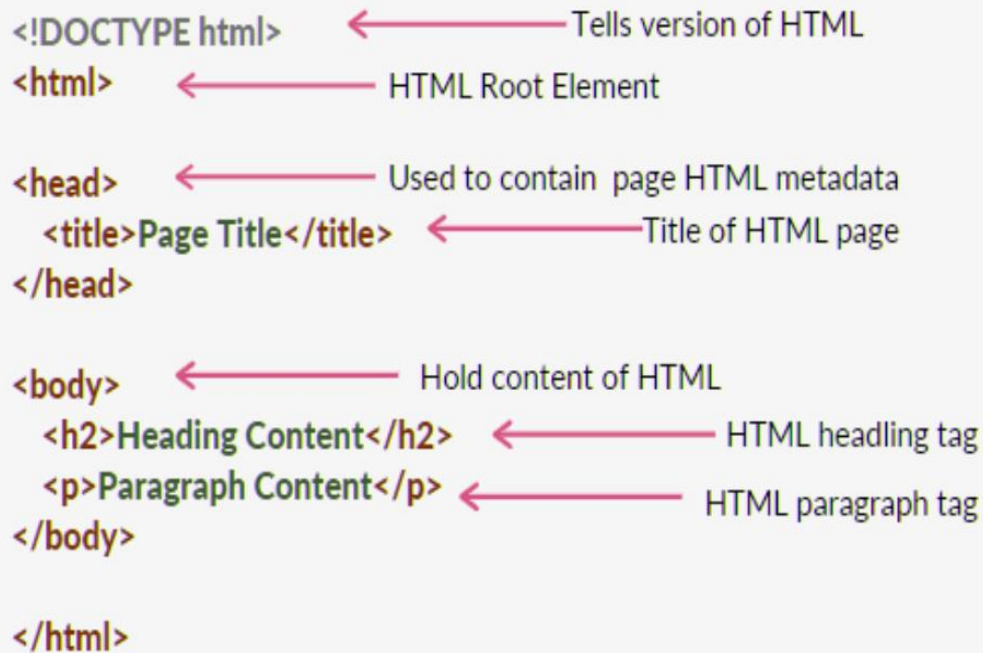
Step3: Click **Install** button

Step4: Click the **Go Live** option after installation of extension then use it.

Note: Please make a directory/folder before using live server and index.html file must be in folder.

Basic Structure of HTML

HTML Page Structure



The diagram illustrates the basic structure of an HTML page with the following code and annotations:

- `<!DOCTYPE html>` ← Tells version of HTML
- `<html>` ← HTML Root Element
- `<head>` ← Used to contain page HTML metadata
 - `<title>Page Title</title>` ← Title of HTML page
- `</head>`
- `<body>` ← Hold content of HTML
 - `<h2>Heading Content</h2>` ← HTML heading tag
 - `<p>Paragraph Content</p>` ← HTML paragraph tag
- `</body>`
- `</html>`

Basic structure is compulsory code should write in html file because it is just like a protocol (rules and regulations) have necessary to write.

Steps:

Step1: `<!doctype html>`: It's tell us which version are used because html 5 gives doctype html for version.

Step2: `<html></html>`: This tag tell us starting and end of the code of html

Step3: `<head></head>`: This tag give functionality to link external files with html like: CSS, Javascript or bootstrap.It carry meta data for webpage.

Step4: `<body></body>`: It is main part of the HTML, all type of data/content are written in this for showing in webpage.

What is Tags and Attributes

Tags: (i) Tags are the building blocks of the element. They define start and end of the html element.

(ii) Tags are enclosed in angular brackets<Tagname>.

(iii)Ex:<p>This is paragraph Tag</p>

There are two types of Tags:

(i)Paired Tag

(ii)Unpaired Tag

(i)Paired Tag: Paired tag are those tags which have opening and closing angular brackets. This tags are used for creating a webpage.

Ex: <p>This is paragraph Tag</p> or

This is Bold Tag

(ii)Unpaired Tags: Unpaired Tags are those tags which have only opening tag.

Ex:
,

Attributes:(i)Attributes are used in tags for giving different functionality to particular tag.

(ii)Different attributes are used for different tags.

(iii)It is already defined in HTML.

Ex: id, class, style, method, action, alt, src, etc

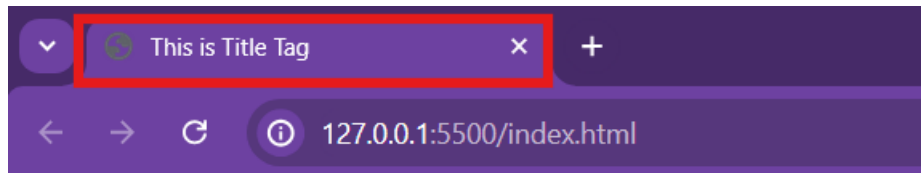
```
<body>
<form action=' ' method='POST'>
    <input type='text' placeholder='Enter Name' name='content'>
</form>
<body>
OR
<body>
    <img src='image path(location)' alt='No Image Found'>
</body>
```

Title Tag

- (i) Title tag is used for give the title or name to the webpage.
- (ii) It is used in head tag and it's a paired tag.

```
index.html X
index.html > html > head > title
21
22 <!DOCTYPE html>
23 <html lang="en">
24 <head>
25 |   <meta charset="UTF-8">
26 |   <meta name="viewport" content="width=device-width, initial-scale=1.0">
27 |   <title>This is Title Tag</title>
28 </head>
29 <body>
30 |   <p>Sample Page</p>
31 </body>
32 </html>
```

Output:



-->

Sample Page

Heading Tag

- (i) Heading Tag are used for providing different headings to Webpage.
- (ii) It works with bottom to top approach; it means last number of heading provide small content or first heading provide huge content.
- (iii) There are 6 types of headings are available in HTML.

`<h1>Heading1</h1>`

`<h2>Heading2</h2>`

`<h3>Heading3</h3>`

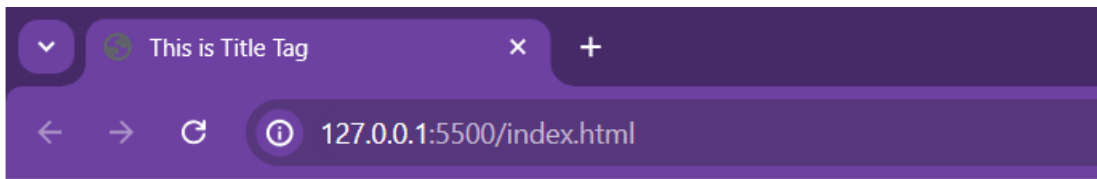
`<h4>Heading4</h4>`

`<h5>Heading5</h5>`

`<h6>Heading6</h6>`

```
index.html X
index.html > html > body
21
22 <!DOCTYPE html>
23 <html lang="en">
24 <head>
25   <meta charset="UTF-8">
26   <meta name="viewport" content="width=device-width, initial-scale=1.0">
27   <title>This is Title Tag</title>
28 </head>
29 <body>
30   <!-- Heading Start -->
31   <h1>This is heading1</h1>
32   <h2>This is heading2</h2>
33   <h3>This is heading3</h3>
34   <h4>This is heading4</h4>
35   <h5>This is heading5</h5>
36   <h6>This is heading6</h6>
37   <!-- Heading End -->
38 </body>
39 </html>
```

Output:



-->

This is heading1

This is heading2

This is heading3

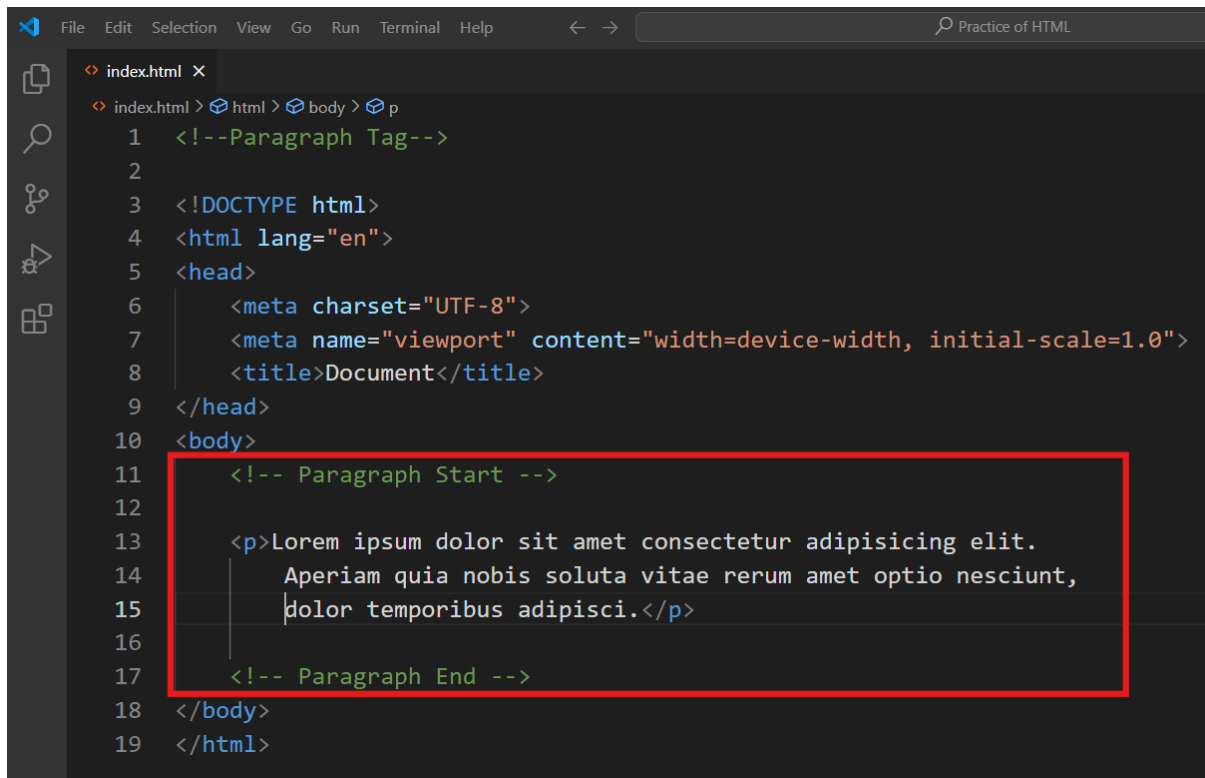
This is heading4

This is heading5

This is heading6

Paragraph Tag

- (i) Paragraph tag is used for writing any type of content in Webpage.
- (ii) `<p>Paragraph</p>` is used for paragraph tag.

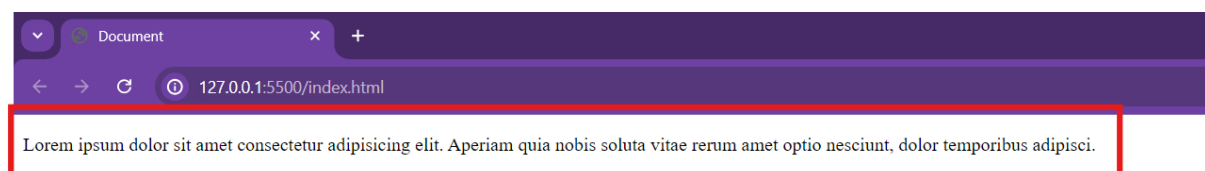


The screenshot shows a code editor with a dark theme. The file is named 'index.html'. The code is as follows:

```
1  <!--Paragraph Tag-->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <!-- Paragraph Start -->
12
13     <p>Lorem ipsum dolor sit amet consectetur adipisicing elit.
14         Aperiam quia nobis soluta vitae rerum amet optio nesciunt,
15         dolor temporibus adipisci.</p>
16
17     <!-- Paragraph End -->
18 </body>
19 </html>
```

A red rectangular box highlights the paragraph content between lines 11 and 17, specifically the `<p>` tag and its text.

Output:



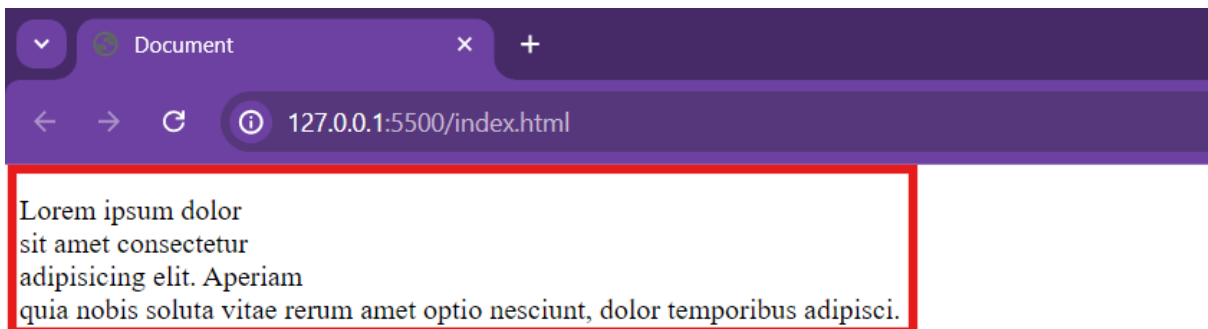
BR Tag

(i) `
` tag is used for line breaking. It means content is shifted to next line after using br tag.

(ii) It is a unpaired tag.

```
index.html X
index.html > html > body > p
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>Document</title>
7  </head>
8  <body>
9      <p>Lorem ipsum dolor<br>sit amet consectetur<br>adipisicing elit.
10         Aperiam<br>quia nobis soluta vitae rerum amet optio nesciunt,
11         dolor temporibus adipisci.</p>
12 </body>
13 </html>
```

Output:



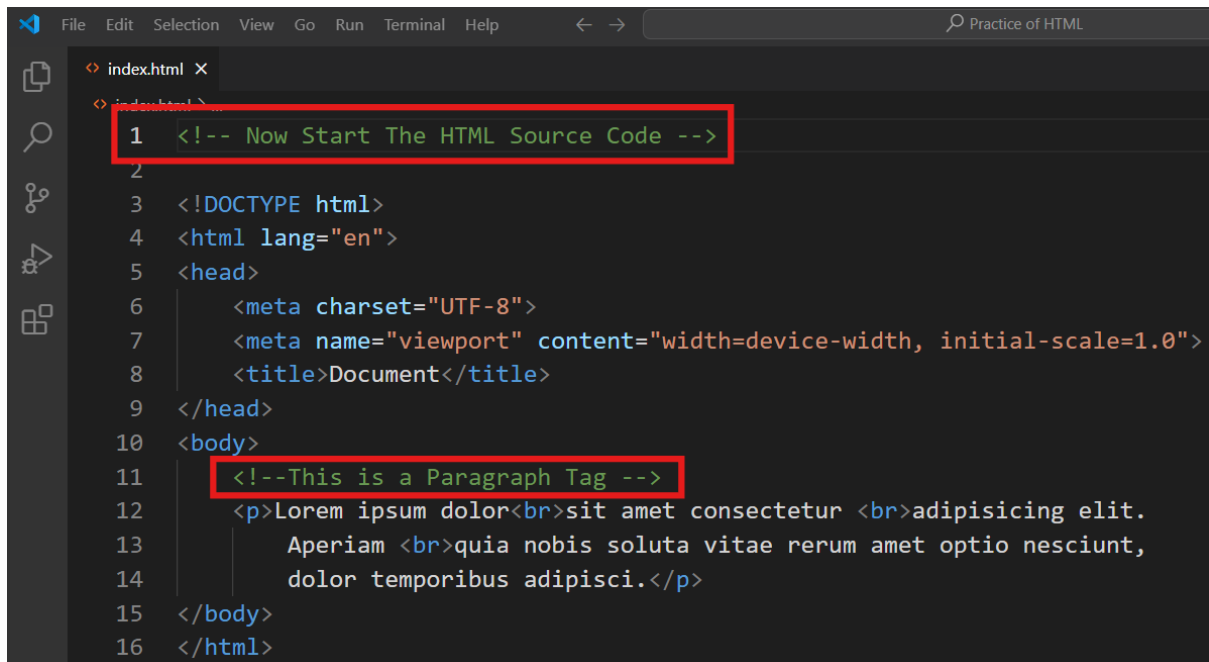
Document

127.0.0.1:5500/index.html

Lorem ipsum dolor
sit amet consectetur
adipisicing elit. Aperiam
quia nobis soluta vitae rerum amet optio nesciunt, dolor temporibus adipisci.

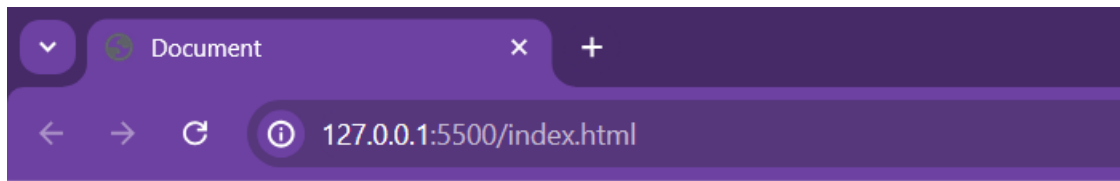
Comments in HTML

- (i) Comments is very important part of html. Comments are used for explaining the source code and its added inside of html file.
- (ii) It is basically designed for developers not a user.
- (iii) HTML file can't give permission for execution of comments.
- (iii) `<!--Content-->` This is way how to write comment in html.



```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11   <!--This is a Paragraph Tag -->
12   <p>Lorem ipsum dolor<br>sit amet consectetur <br>adipisicing elit.
13     Aperiam <br>quia nobis soluta vitae rerum amet optio nesciunt,
14     dolor temporibus adipisci.</p>
15 </body>
16 </html>
```

Output:

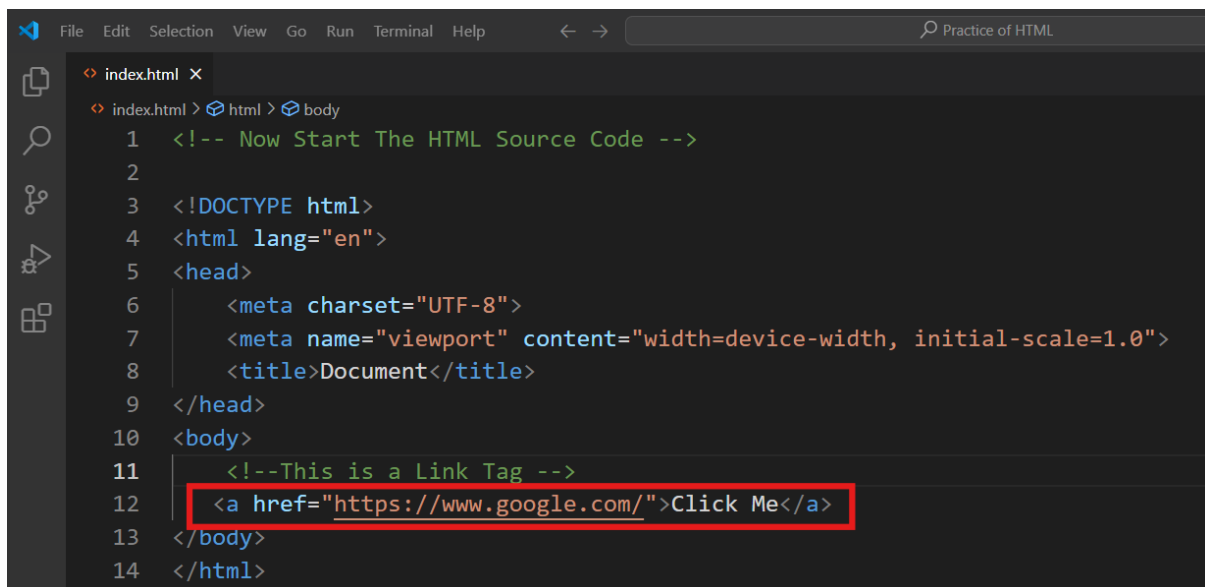


Lorem ipsum dolor
sit amet consectetur
adipiscing elit. Aperi-
am quia nobis soluta vitae
rerum amet optio nesciunt,
dolor temporibus adipisci.

Hyper-Link

- (i)Hyper link is a link shown in blue color with underline.
- (ii)It is used for switching one file to another file or another webpage.
- (iii)**Hyper-Text**: Hyper-Text is a text or content shown in webpage for giving clickable functionality.
- (iv)In Hyper-text, customization is also available through CSS.
- (v)<a> tag is used for Hyper link in HTML.
- (vi)Most commonly used **attribute** for hyperlink is:(href)

Note: href attribute is used for add link in hyper-text for swiching another page or another file.

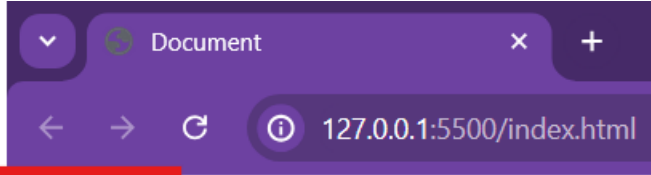


The screenshot shows a code editor with a dark theme. The file is named 'index.html'. The code is as follows:

```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11   <!--This is a Link Tag -->
12   <a href="https://www.google.com/">Click Me</a>
13 </body>
14 </html>
```

The line containing the hyperlink tag, `Click Me`, is highlighted with a red rectangular box.

Output:



[Click Me](#)

How to add Images, Videos, audios in HTML

Images:(i) Image tag is used for fetching image in webpage

(ii) this tag is used for fetching image in webpage.

(iii)It is a unpaired tag.

(iii)Mainly two attributes are used in image tag: src, alt

(iv)src: src stands for Source;it is used for taking path or location of the image.

(v)alt: alt stands for alternate; it is used as alternate option, if any change image is not load properly in webpage then alt attribute will be executed automatically as replacement of src for user.

Videos:(i)Video tag is used for fetching videos in webpage

(ii)<video> this tag is used for fetching video in webpage.

(iii)Mainly four attributes are used in video tag: src, width, height, controls

(iv)src: src stands for Source;it is used for taking path or location of the video.

(v)controls: Controls are used for giving controls to video like volume button, progress bar and so on.

Audio:(i)Audio tag is used for fetching audio in webpage

(ii)<audio> this tag is used for fetching audio in webpage.

(iii)Mainly two attributes are used in audio tag: src, controls

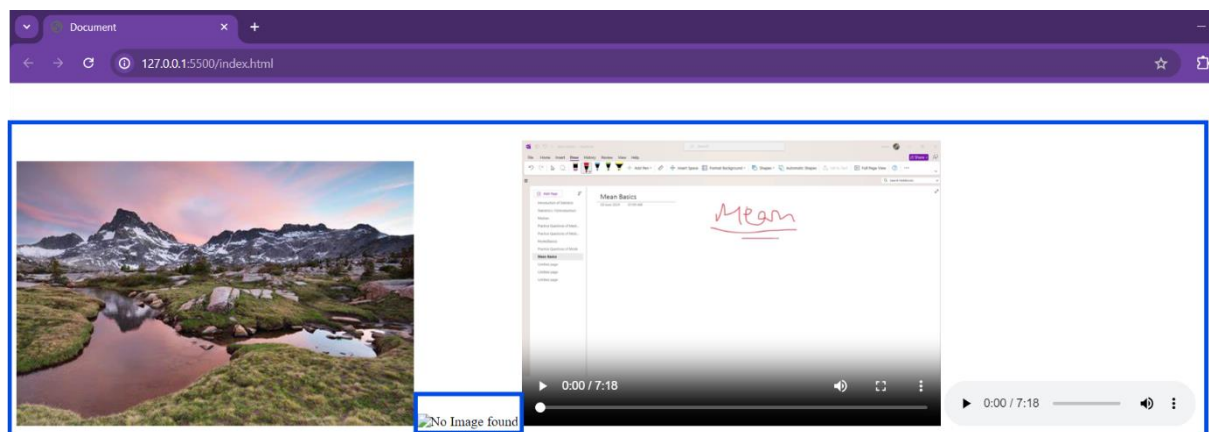
(iv)src: src stands for Source;it is used for taking path or location of the image.

(v)controls: Controls are used for giving controls to audio like volume button, progress bar and so on.

Note: If you want to fetch video and audio in webpage; please make sure audio and video must be have inside your index.html folder otherwise audio and video not work.

```
File Edit Selection View Go Run Terminal Help Practice of HTML
index.html X
index.html > html > body > video
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11   <!--This is a Image Tag with src-->
12   
13
14   <!--This is a Image Tag with alt-->
15   
16
17   <!--This is a Video tag-->
18   <video src="video.mp4"height='400'width='500' controls></video>
19
20   <!--This is a Audio tag-->
21   <audio src="video.mp4" controls>
22 </body>
23 </html>
```

Output:



I-frame Tag

(i) I-frame works just like a frame; it means iframe loads the duplicate copy of any other HTML webpage to our webpage.

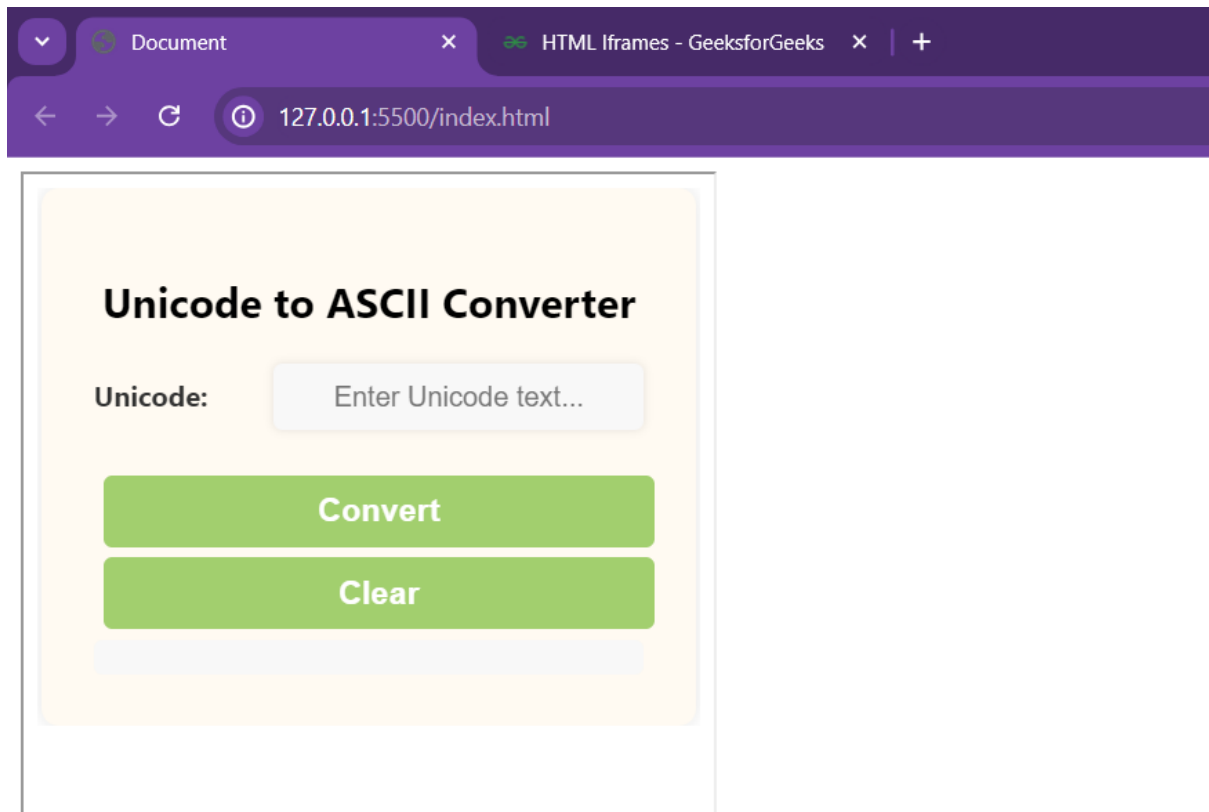
(ii) `<iframe></iframe>` this tag is used for iframe

(iii) Mainly three attributes are used in iframe: src, height, width

(iv) **src**: src stands for Source; it is used for taking path or location of the other webpage.

```
index.html X
index.html > html > body > iframe
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <!--This is a Iframe Tag with src-->
12     <iframe src="https://media.geeksforgeeks.org/wp-content/uploads/20240206111438/uni2.html"
13         height="370"
14         width="400">
15     </iframe>
16 </body>
17 </html>
```

Output:



Div and Span Tag

Div:(i) Div tag is a generic element.

(ii)It is a block level element that wraps large chunks of code and defines divisions within a page.

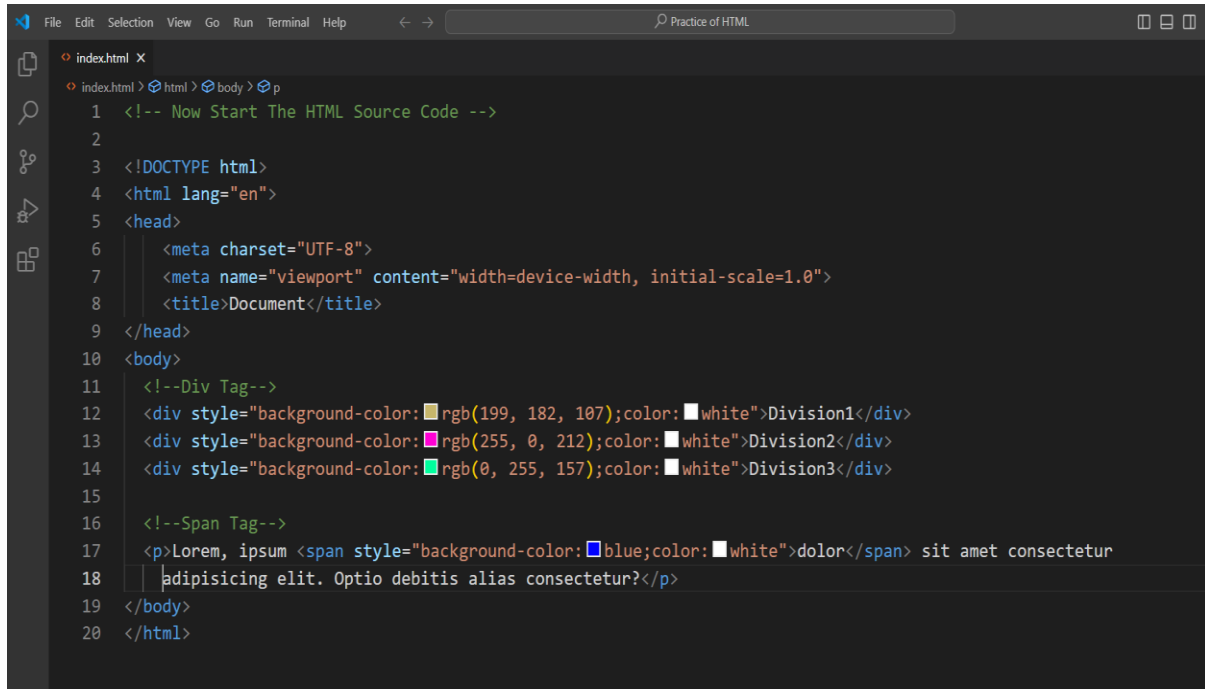
(iii)It's used for block level organization and styling of page elements, such as laying out elements on the web page.

Span:(i) It is also a generic element.

(ii)An inline element that wraps small pieces of content within its parent elements.

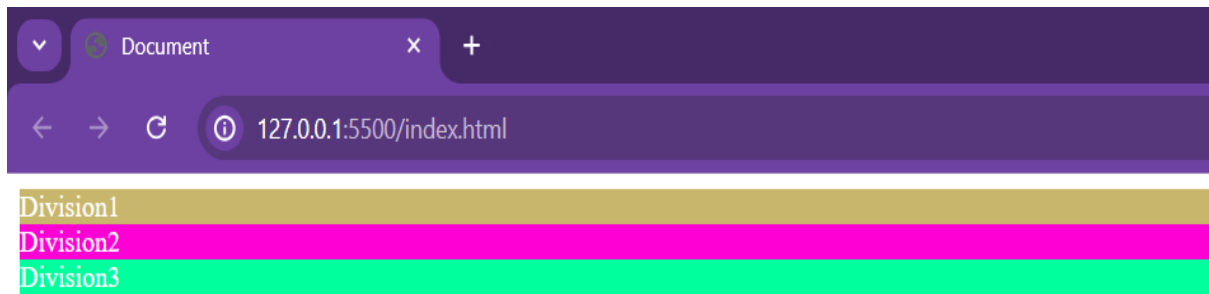
(iii)It's used for content within its parent element. It is used for inline organization and styling, such as styling a particular part of your content differently or manipulating it with JavaScript.

(iv)Span element can also be used as containers for inline elements.

A screenshot of a code editor window titled 'Practice of HTML'. The editor shows an HTML file named 'index.html'. The code includes a DOCTYPE declaration, a head section with meta tags for charset, viewport, and title, and a body section. In the body, there are three div elements with different background colors and a span element used to style a portion of a paragraph. The code is as follows:

```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11 <!--Div Tag-->
12 <div style="background-color:rgb(199, 182, 107);color:white">Division1</div>
13 <div style="background-color:rgb(255, 0, 212);color:white">Division2</div>
14 <div style="background-color:rgb(0, 255, 157);color:white">Division3</div>
15
16 <!--Span Tag-->
17 <p>Lorem, ipsum <span style="background-color:blue;color:white">dolor</span> sit amet consectetur
18   adipiscing elit. Optio debitis alias consectetur</p>
19 </body>
20 </html>
```

Output:



Lorem, ipsum dolor sit amet consectetur adipisicing elit. Optio debitis alias consectetur?

Lists

(i) List is an important tag in html. It's used for display the content or any type of data on webpages in ordered, unordered and description form.

(ii) There are 3 types of lists in HTML

(ii.i) **Ordered List:** (i) Ordered lists are those list have shown the in numeric, romans and so on like: {(1,2,3,...),(i,ii,iii...)}
(ii) `` and `` tags are used for make ordered list.

(ii.ii) **Unordered List:** Unordered lists are those lists have shown the content in doted or different symbolic.
(ii) `` and `` tags are used for make ordered list.

(ii.iii) **Description List:** Description list are those lists have shown the content just like word meaning.
(ii) `<dl>` , `<dt>` and `<dd>` tags are used for make ordered list.

Ex: Ice-Cream:

Ice-Cream is very delicious

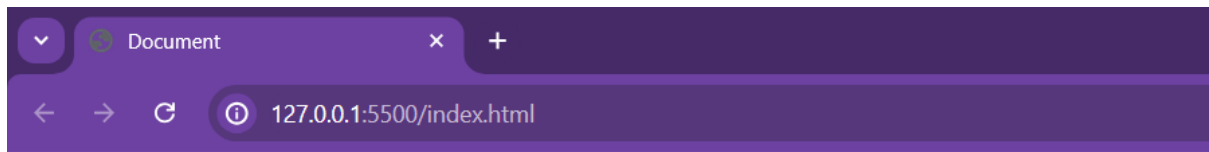
Note: Give CSS for make creative or attractive lists

```
File Edit Selection View Go Run Terminal Help
Practice of HTML

index.html x
index.html > html > body
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <label style="color:rgb(222, 50, 8)">Ordered List</label><br>
12     <!--Ordered List-->
13     <ol style="color:blueviolet">
14         <li>Burger</li>
15         <li>Pizza</li>
16     </ol>
17
18     <label style="color:rgb(222, 50, 8)">Ordered List</label><br>
19     <!--Unordered List-->
20     <ul style="color:rgb(106, 180, 127)">
21         <li>Paragraph1</li>
22         <li>Paragraph2</li>
23     </ul>
24
25     <label style="color:rgb(222, 50, 8)">Description List</label><br>
26     <!--Description List-->
27     <dl style="color:rgb(55, 43, 226)">
28         <dt>Pizza</dt>
```

```
25     <label style="color:rgb(222, 50, 8)">Description List</label><br>
26     <!--Description List-->
27     <dl style="color:rgb(55, 43, 226)">
28         <dt>Pizza</dt>
29         <dd>Pizza is dangerous for health</dd>
30     </dl>
31 </body>
32 </html>
```

Output:



Ordered List

1. Burger
2. Pizza

Ordered List

- Paragraph1
- Paragraph2

Description List

Pizza

Pizza is dangerous for health

Tables

(i) Table tag is used for make table in webpage for storing different type of data as tabular form.

(ii) Table carry rows and columns for data manipulation

(iii) There are different types of tags are used for make a table in html like: <table>, <tr>, <th>, <td>, <caption> and so on.

Caption=Title of Table

tr= Table Row

th=Table Head

td= Table Data

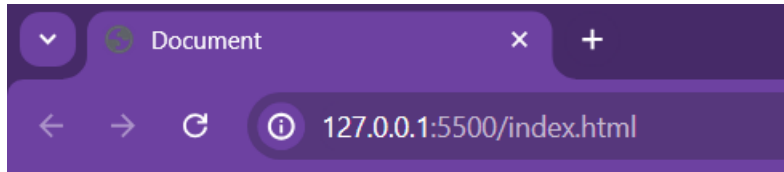
(iv) There are various attribute are used in table like border, style, id, class and so on.

Border=Give Border to table

```
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <!-- Table tag -->
12     <table border="2">
13         <caption>Sudent Data</caption>
14         <tr>
15             <th>Name</th>
16             <th>Course</th>
17             <th>Roll.No</th>
18         </tr>
19         <tr>
20             <td>Arun</td>
21             <td>BBA</td>
22             <td>123</td>
23         </tr>
24         <tr>
25             <td>Varun</td>
26             <td>B.Com</td>
27             <td>456</td>
28         </tr>
```

```
23     </tr>
24     <tr>
25         <td>Varun</td>
26         <td>B.Com</td>
27         <td>456</td>
28     </tr>
29 </table>
30 </body>
31 </html>
```

Output:

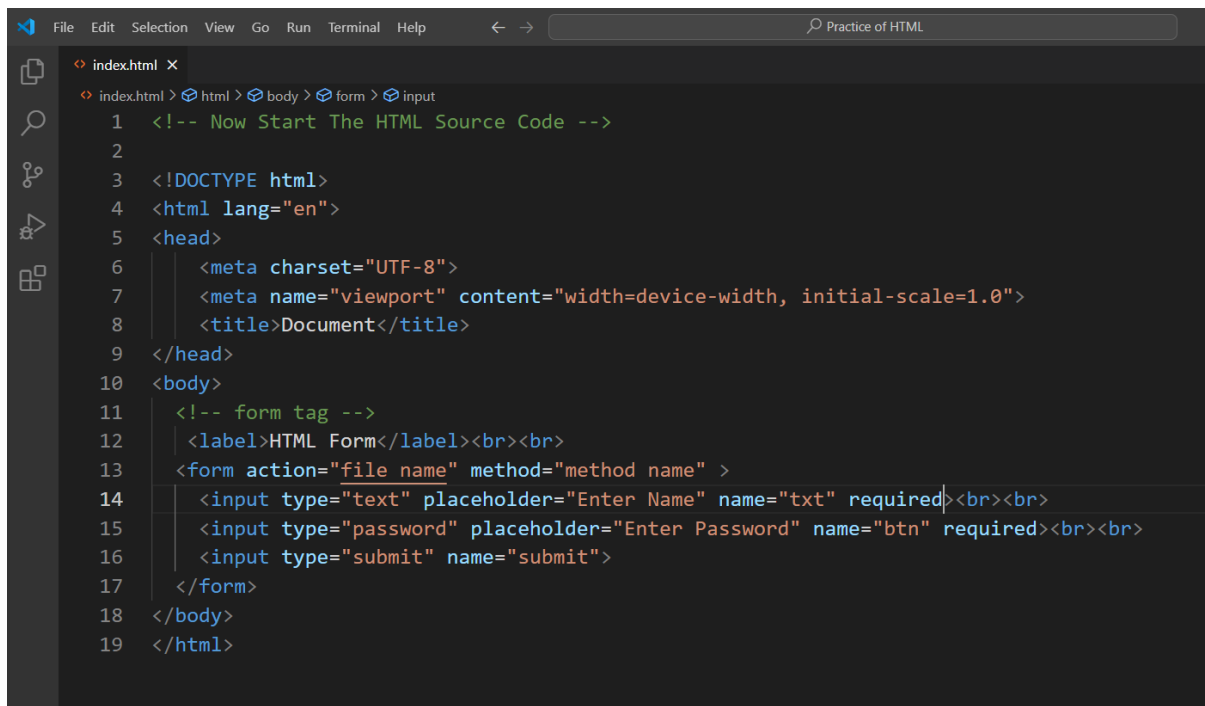


Sudent Data

Name	Course	Roll.No
Arun	BBA	123
Varun	B.Com	456

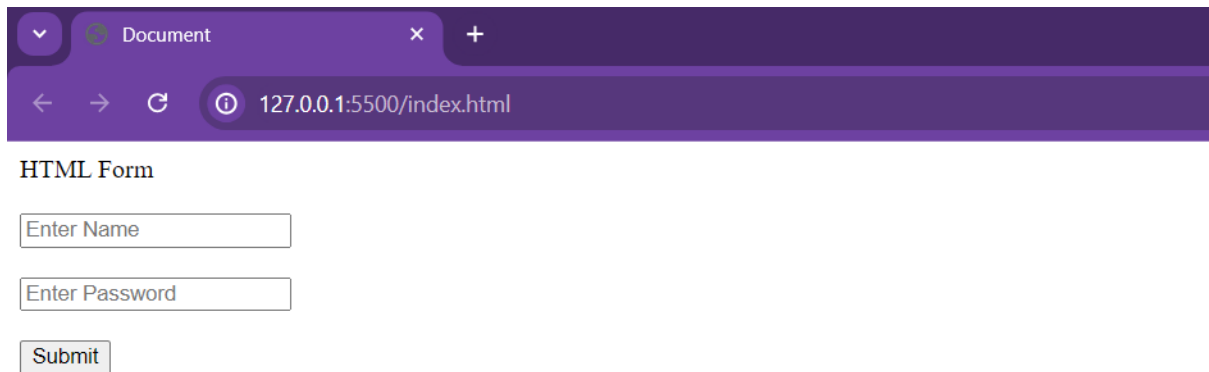
Form

- (i) Form tag is used for making different type of forms in html like registration, login etc.
- (ii) These forms are designed for taking input from user for storing data into databases.
- (iii) Form tag take different type of data like: Numeric, alphabetic, data time, password, radio and so on.
- (iv) These types of form basically work with databases for storing data.
- (v) There are various input fields are present in html form:
text, password, radio, submit, email, number, checkbox etc.
- (vi) There are different types of method are used in form like: GET, POST, etc.
- (v) There are different attributes are used in this for give various functionality like: method, name, action, required, placeholder etc.

A screenshot of a code editor window titled 'index.html'. The editor shows the following HTML code:

```
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <!-- form tag -->
12     <label>HTML Form</label><br><br>
13     <form action="file name" method="method name" >
14         <input type="text" placeholder="Enter Name" name="txt" required><br><br>
15         <input type="password" placeholder="Enter Password" name="btn" required><br><br>
16         <input type="submit" name="submit">
17     </form>
18 </body>
19 </html>
```

Output:



A screenshot of a web browser window. The address bar shows the URL `127.0.0.1:5500/index.html`. The page content is titled "HTML Form" and contains three input fields: "Enter Name", "Enter Password", and a "Submit" button.

HTML Form

Enter Name

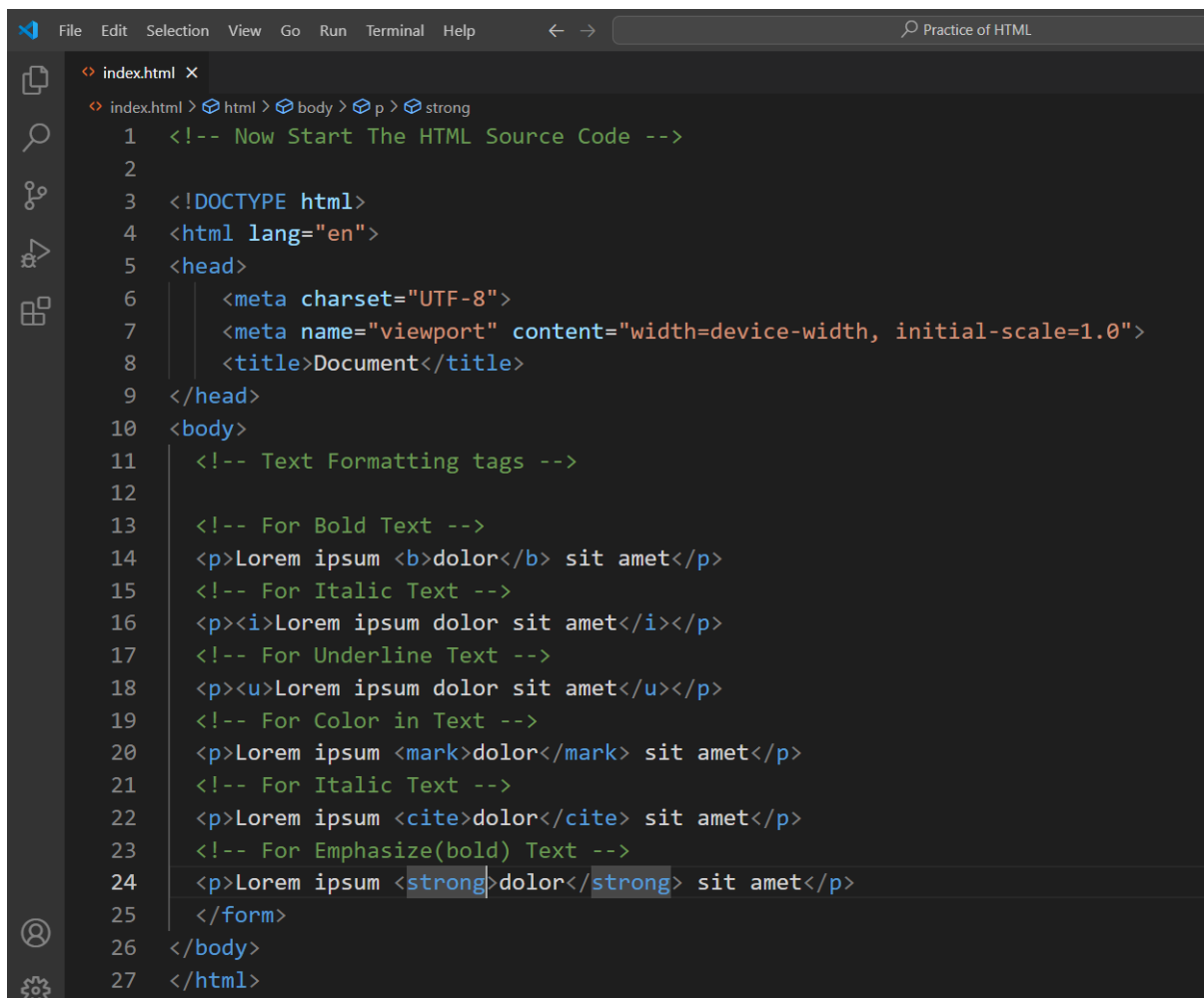
Enter Password

Submit

Text Formatting Tags

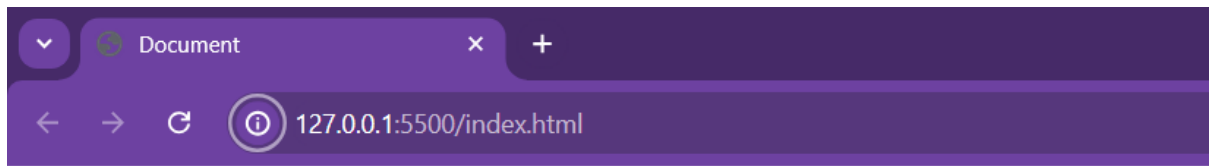
(i)Text formatting tags means create changes on text like change color, font, size etc.

(ii)There are various types of text formatting tags are used in html like: `em`, `strong`, `b`, `i`, `u`, `mark`, `cite`, etc.

A screenshot of a code editor window titled 'index.html'. The editor shows HTML code for a document. The code includes a DOCTYPE declaration, a head section with meta tags for charset and viewport, and a body section. The body section contains several paragraphs of Lorem ipsum text, each demonstrating a different text formatting tag: bold (), italic (<i>), underline (<u>), mark (<mark>), cite (<cite>), and strong (). The code is as follows:

```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11   <!-- Text Formatting tags -->
12
13   <!-- For Bold Text -->
14   <p>Lorem ipsum <b>dolor</b> sit amet</p>
15   <!-- For Italic Text -->
16   <p><i>Lorem ipsum dolor sit amet</i></p>
17   <!-- For Underline Text -->
18   <p><u>Lorem ipsum dolor sit amet</u></p>
19   <!-- For Color in Text -->
20   <p>Lorem ipsum <mark>dolor</mark> sit amet</p>
21   <!-- For Italic Text -->
22   <p>Lorem ipsum <cite>dolor</cite> sit amet</p>
23   <!-- For Emphasize(bold) Text -->
24   <p>Lorem ipsum <strong>dolor</strong> sit amet</p>
25 </body>
26 </html>
```

Output:



Lorem ipsum **dolor** sit amet

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet

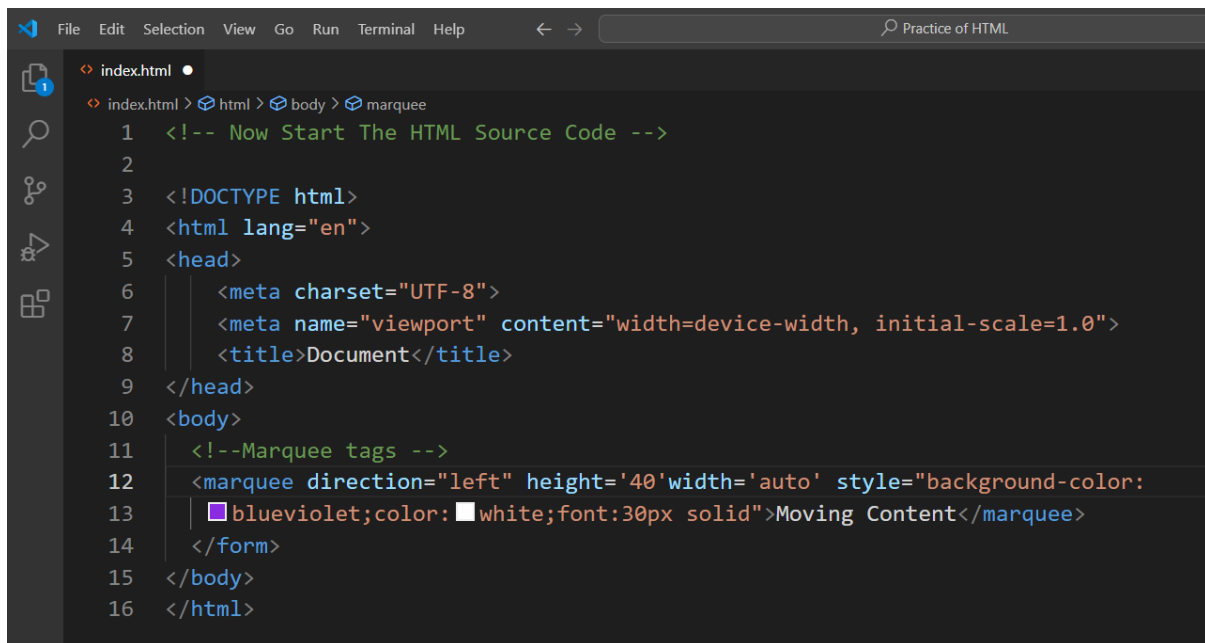
Lorem ipsum **dolor** sit amet

Lorem ipsum *dolor* sit amet

Lorem ipsum **dolor** sit amet

Marquee Tag

- (i) Marquee tag is a parent tag
- (ii) It is used for move the line or content just like footer content move in news on Television.
- (iii) Text of marquee tag move left to right or right to left with a dedicated speed.
- (iv) There are various attributes are used in marquee tag: behavior, direction, height, width, loop, etc.



```
index.html
index.html > html > body > marquee
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11     <!--Marquee tags -->
12     <marquee direction="left" height='40' width='auto' style="background-color:
13         blueviolet;color:white;font:30px solid">Moving Content</marquee>
14     </form>
15 </body>
16 </html>
```

Output:



Id and Classes

Id:(i) The id attribute uniquely identifies an element on a page.

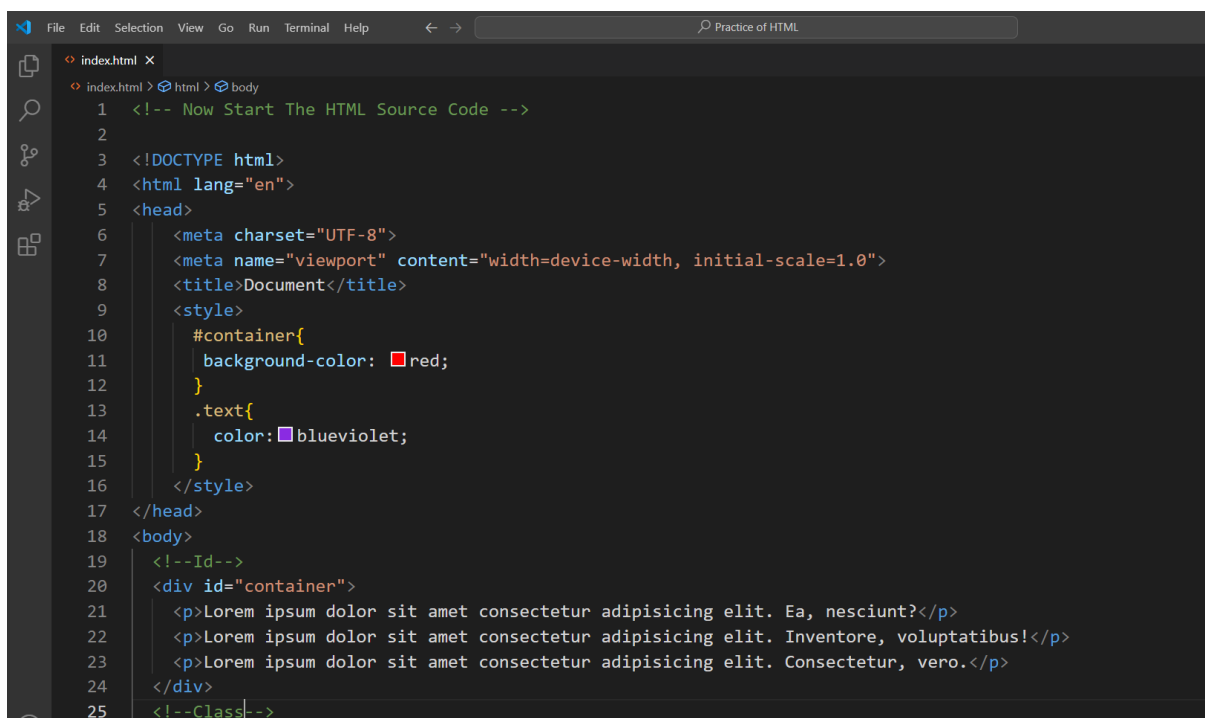
(ii)Each element on a page can only have one id attribute, and the id name must be unique.

(iii)Id denotes (#) symbol.

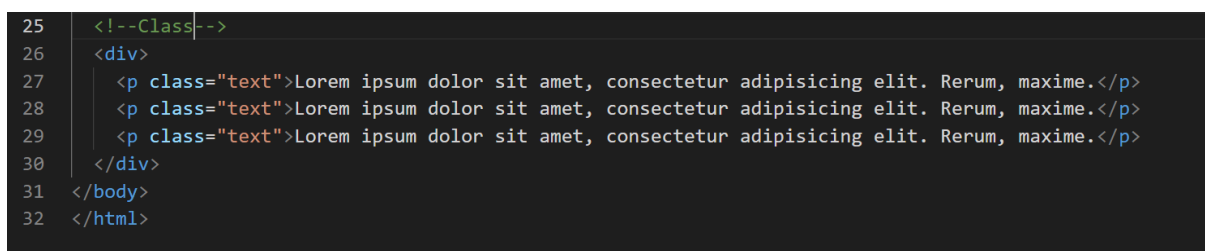
Class:(i) The class attribute groups elements together and applies styles or scripts to them.

(ii)Multiple elements on a page can have the same class attribute, and the class name can be used to apply common styles to different parts of the page.

(iii)Class denotes (.) symbol.

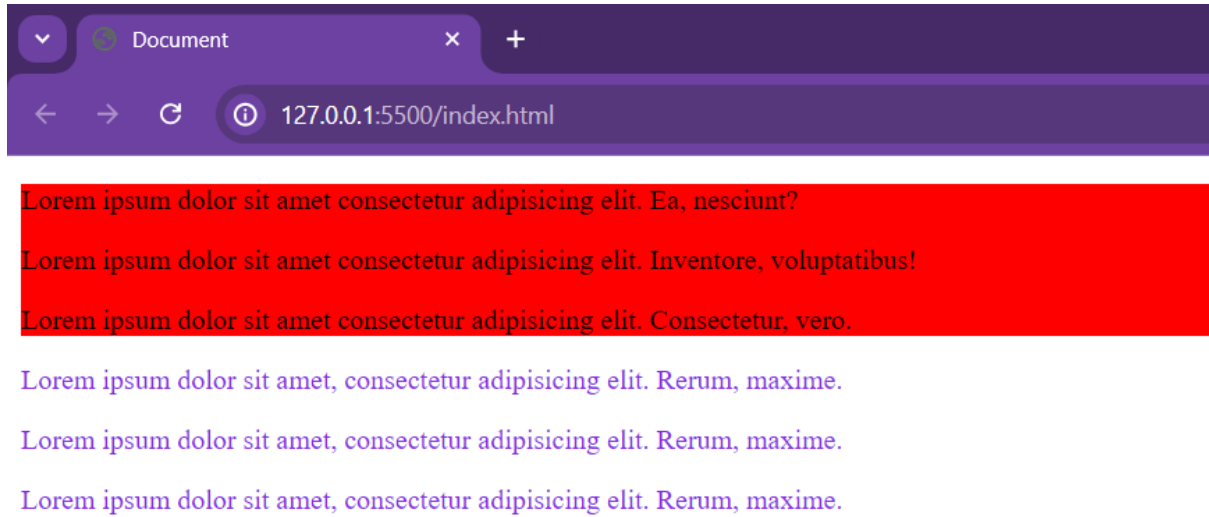


```
index.html X
index.html > html > body
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9      <style>
10         #container{
11             background-color: red;
12         }
13         .text{
14             color: blueviolet;
15         }
16     </style>
17 </head>
18 <body>
19     <!--Id-->
20     <div id="container">
21         <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Ea, nesciunt?</p>
22         <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Inventore, voluptatibus!</p>
23         <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Consectetur, vero.</p>
24     </div>
25     <!--Class-->
```



```
25     <!--Class-->
26     <div>
27         <p class="text">Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rerum, maxime.</p>
28         <p class="text">Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rerum, maxime.</p>
29         <p class="text">Lorem ipsum dolor sit amet, consectetur adipisicing elit. Rerum, maxime.</p>
30     </div>
31 </body>
32 </html>
```

Output:



Graphics Tags (SVG, Canvas)

SVG:(i) SVG stands for Scalable Vector Graphics.

(ii)SVG is used to define vector-based graphics for the web.

(iii)SVG defines graphics in XML format.

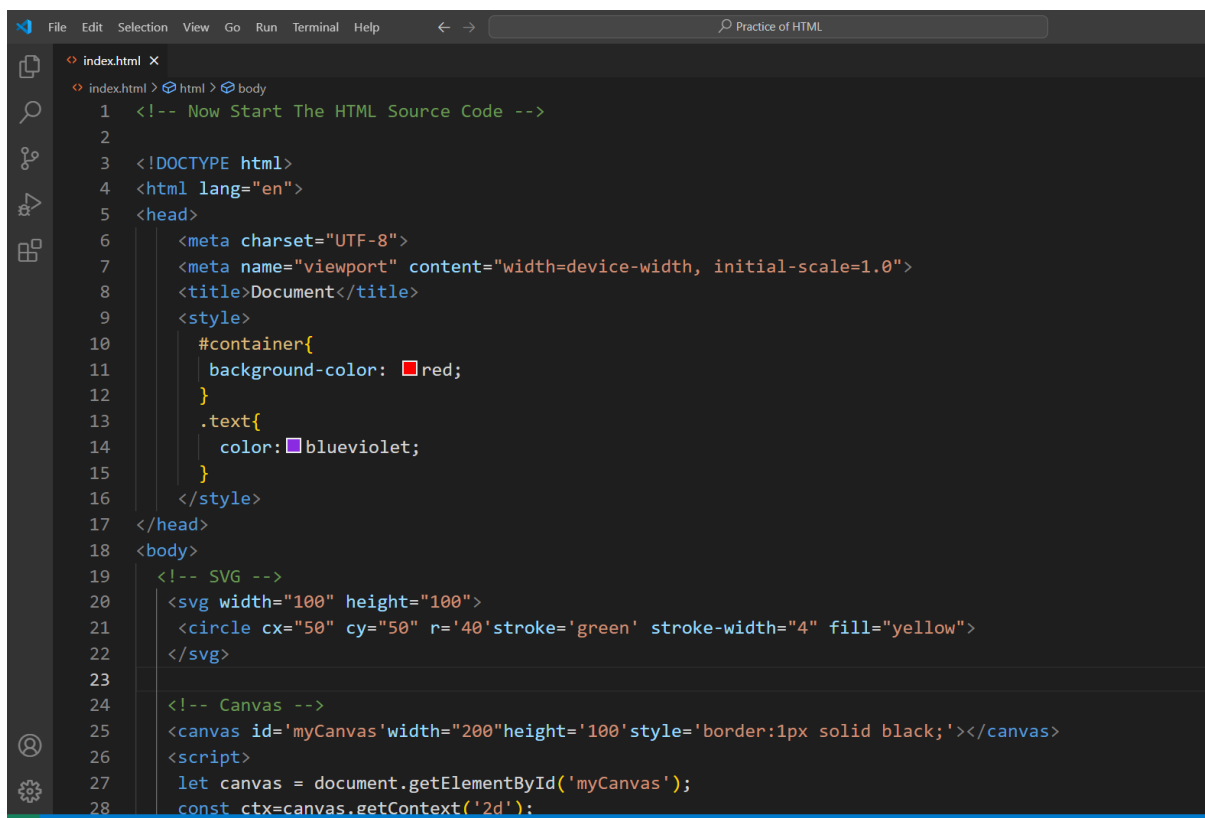
(iv)Each element and attributes in SVG files can be animated.

(v)SVG integrates with other standards, such as CSS, DOM, XSL and JavaScript.

Canvas:(i) The HTML (canvas) element is used to draw graphics on the fly, via scripting (usually JavaScript)

(ii)The <canvas> element is only a container for graphics. You must use a script to actually draw a graphics.

(iii) Canvas has several methods for drawing paths, boxes, circles, text, and adding images.

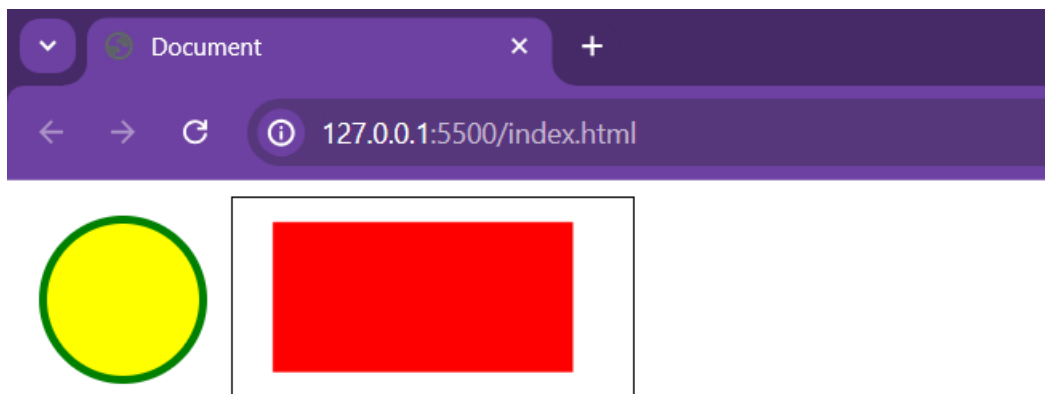
A screenshot of a code editor window titled 'Practice of HTML'. The editor shows an HTML file named 'index.html' with the following code:

```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9   <style>
10     #container{
11       background-color: red;
12     }
13     .text{
14       color: blueviolet;
15     }
16   </style>
17 </head>
18 <body>
19   <!-- SVG -->
20   <svg width="100" height="100">
21     <circle cx="50" cy="50" r="40" stroke='green' stroke-width="4" fill="yellow">
22   </svg>
23
24   <!-- Canvas -->
25   <canvas id='myCanvas'width="200"height='100'style='border:1px solid black;'></canvas>
26   <script>
27     let canvas = document.getElementById('myCanvas');
28     const ctx=canvas.getContext('2d');
```



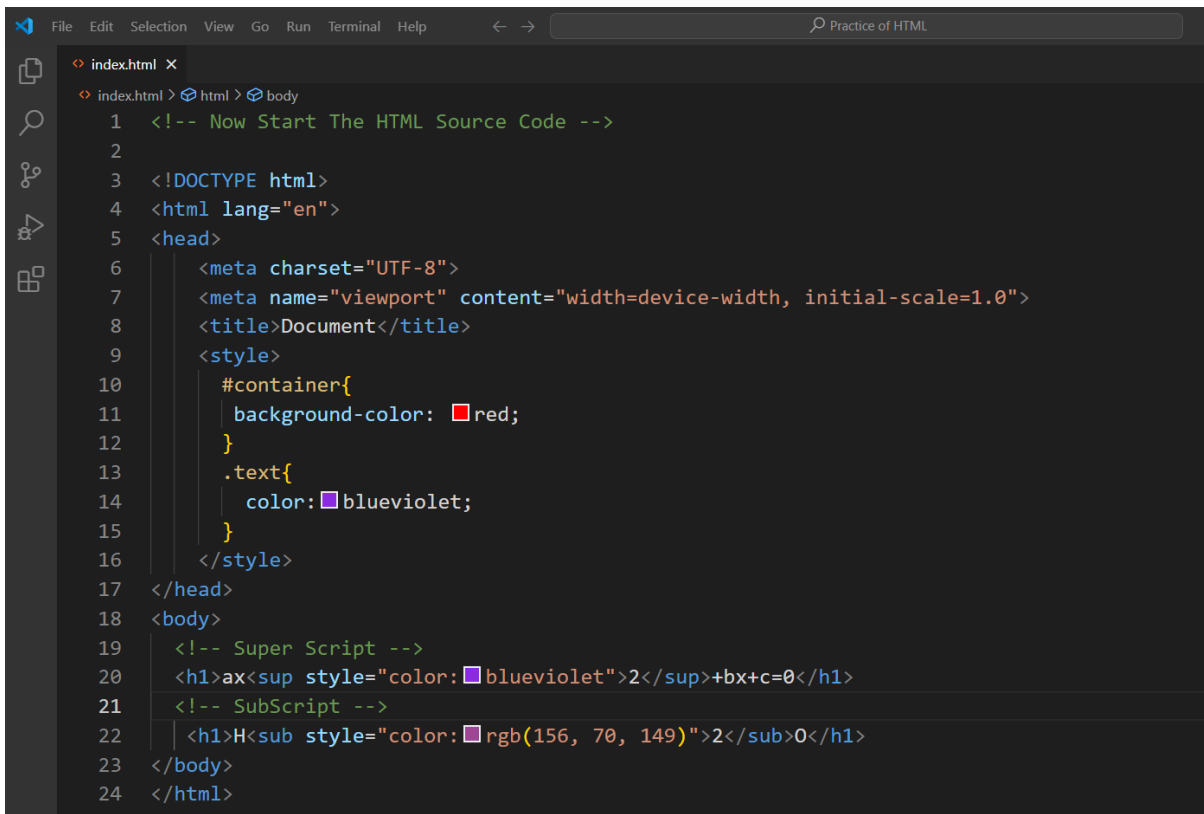
```
23  
24 <!-- Canvas -->  
25 <canvas id='myCanvas'width="200"height='100'style='border:1px solid black;'></canvas>  
26 <script>  
27   let canvas = document.getElementById('myCanvas');  
28   const ctx=canvas.getContext('2d');  
29   ctx.fillStyle='red';  
30   ctx.fillRect(20,12,150,75);  
31 </script>  
32 </body>  
33 </html>
```

Output:



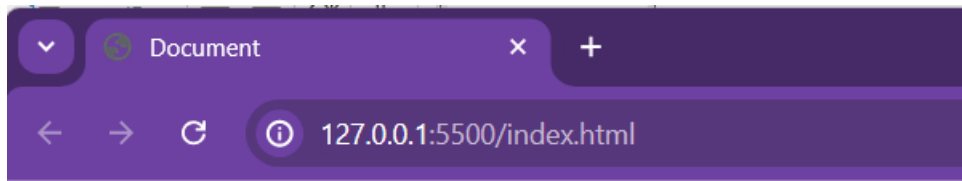
Sup or Sub tag

- (i) Sup stands for **super script** or sub stands for **subscript**.
- (ii) Subscript is used for subscript making text appear slightly **below** the normal line.
- (iii) Super script is used for super script making text appear slightly **upper** the normal line.
- (iv) These tags are employed to format text in a way that is either lower or higher than the regular text line, useful for applications such as **chemical formulas** or **mathematical expressions**.



```
index.html x
index.html > html > body
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9      <style>
10         #container{
11             background-color: red;
12         }
13         .text{
14             color: blueviolet;
15         }
16     </style>
17 </head>
18 <body>
19     <!-- Super Script -->
20     <h1>ax<sup style="color: blueviolet">2</sup>+bx+c=0</h1>
21     <!-- SubScript -->
22     <h1>H<sub style="color: rgb(156, 70, 149)">2</sub>O</h1>
23 </body>
24 </html>
```

Output:



$$ax^2+bx+c=0$$



Center, Pre, Code tag

Center: (i) Center Tag is used for show the content in center

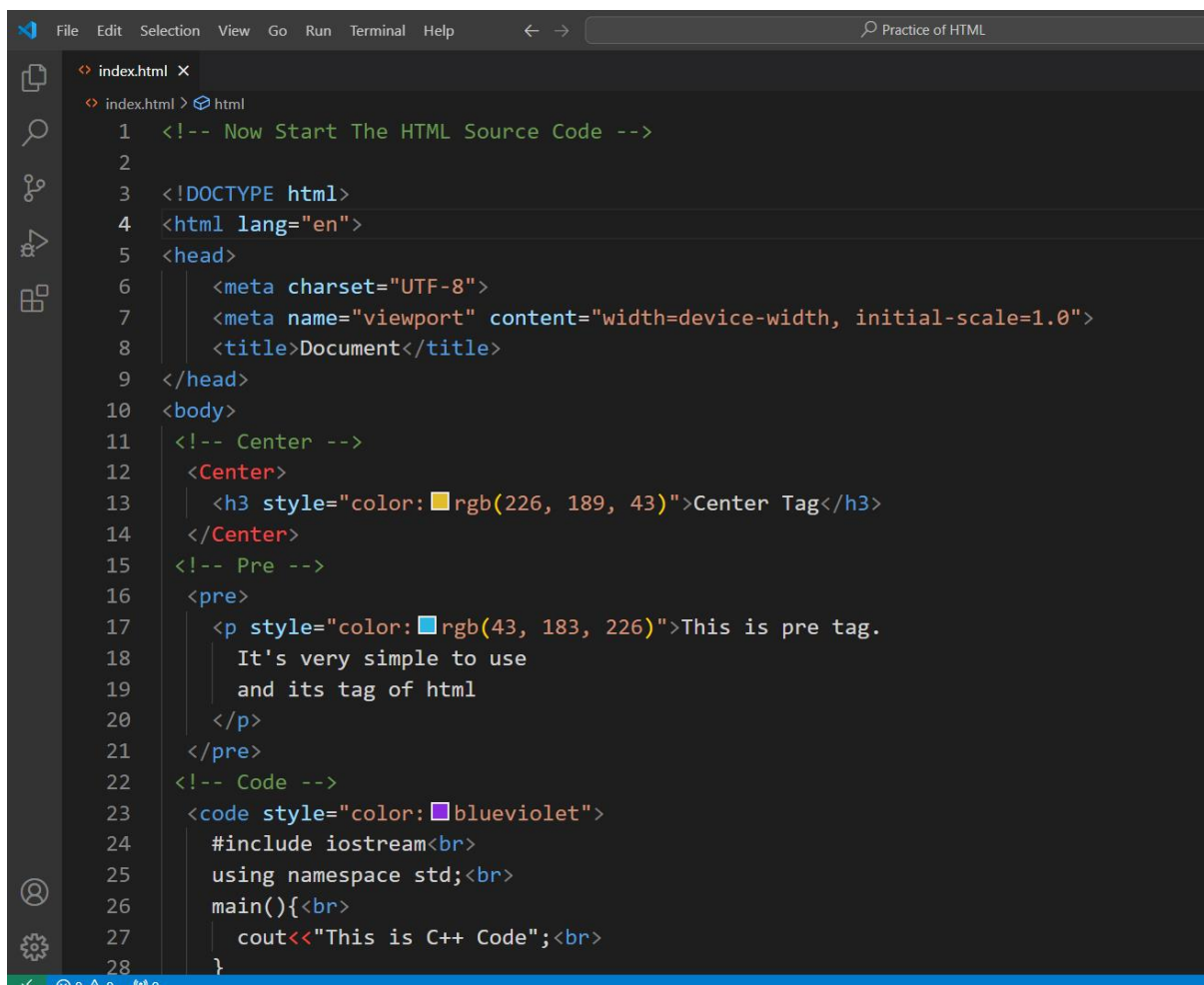
(ii) It is a paired Tag

(iii) It is used for align text on center of the webpage.

Pre: The pre tag in HTML defines a block of preformatted text, preserving spaces, line breaks and tabs. It displays text in a fixed-width font, which can be styled using CSS. This tag is useful for displaying code, formatted text, and preserving text layout.

Code: (i) The HTML `<code>` tag is a semantic element used to define a piece of computer code.

(ii) When creating web pages, it's often necessary to display programming code, and the `<code>` tag makes it easy to do so.

A screenshot of a code editor window titled "Practice of HTML". The editor shows an HTML file named "index.html" with the following code:

```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6     <meta charset="UTF-8">
7     <meta name="viewport" content="width=device-width, initial-scale=1.0">
8     <title>Document</title>
9 </head>
10 <body>
11 <!-- Center -->
12 <Center>
13     <h3 style="color:rgb(226, 189, 43)">Center Tag</h3>
14 </Center>
15 <!-- Pre -->
16 <pre>
17     <p style="color:rgb(43, 183, 226)">This is pre tag.
18         It's very simple to use
19         and its tag of html
20     </p>
21 </pre>
22 <!-- Code -->
23 <code style="color:blueviolet">
24     #include iostream<br>
25     using namespace std;<br>
26     main(){<br>
27         cout<<"This is C++ Code";<br>
28     }
```

```
22 <!-- Code -->
23 <code style="color: blueviolet">
24     #include iostream<br>
25     using namespace std;<br>
26     main(){<br>
27         cout<<"This is C++ Code";<br>
28     }
29 </code>
30 </body>
31 </html>
```

Output:



Center Tag

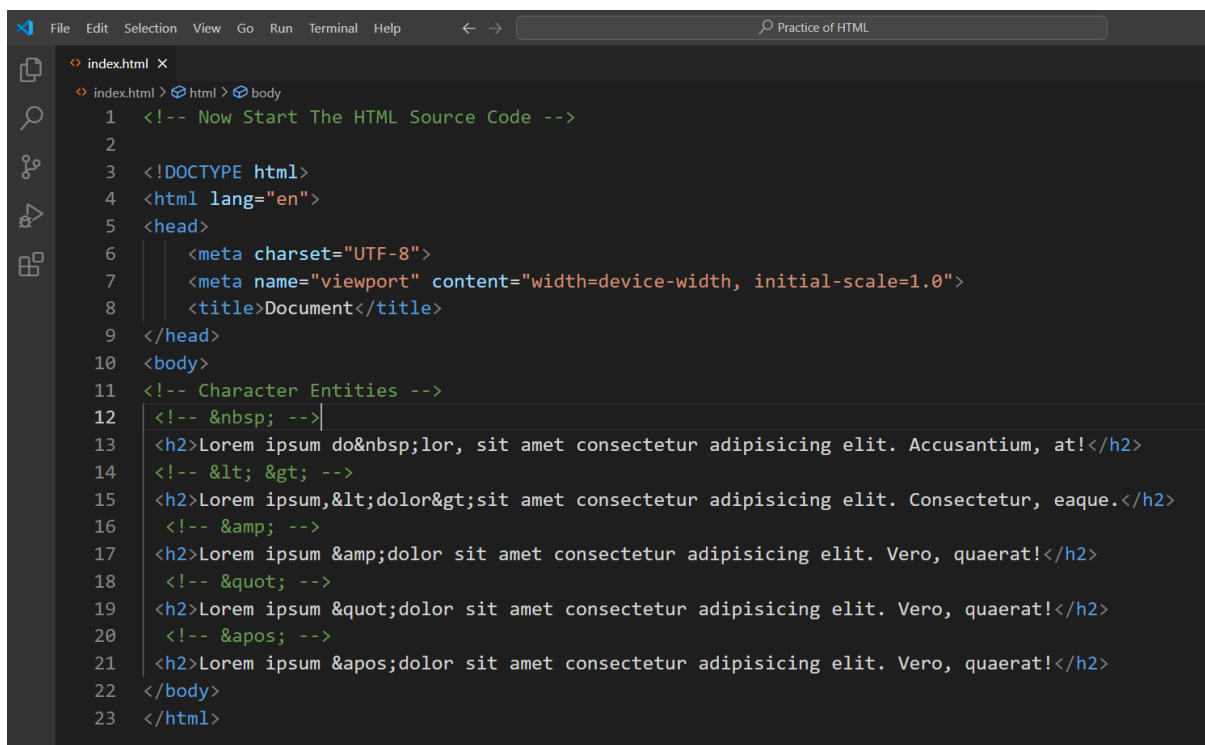
```
This is pre tag.
It's very simple to use
and its tag of html
```

```
#include iostream
using namespace std;
main(){
cout<<"This is C++ Code";
}
```

Use of (&)

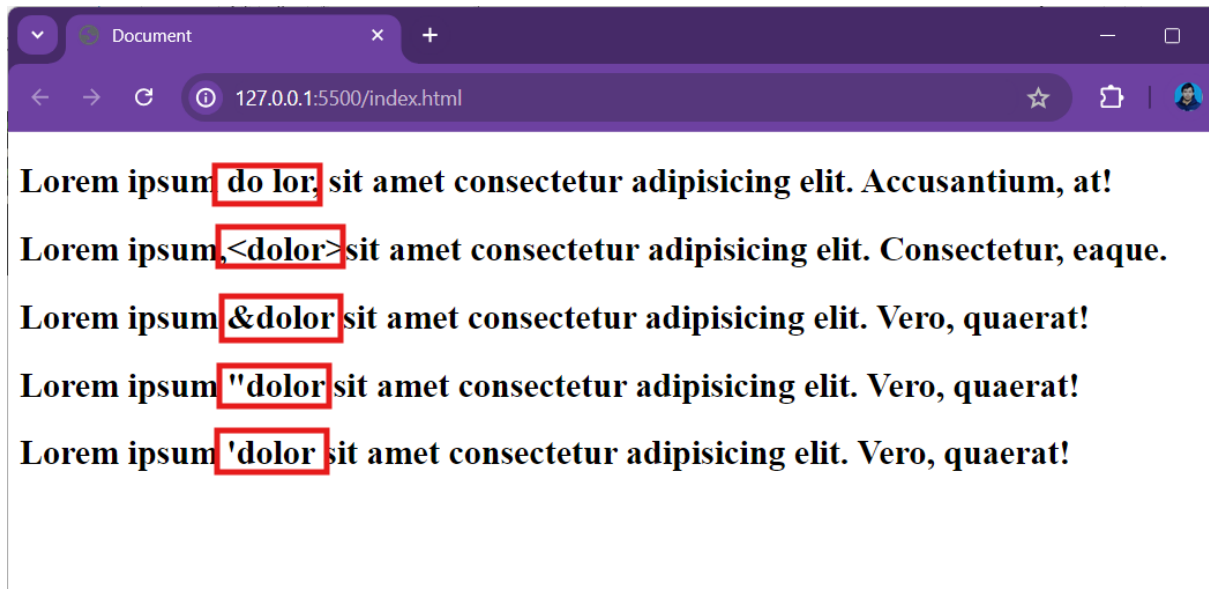
- (i) & is a character entity.
- (ii) Reserved character in HTML must be replaced with entities.
- (iii) Entities name or entity numbers can be used to display reserved HTML characters.
- (iv) There are various character entities are available in HTML

Result	Description	Name
<	Less Than	<
>	Greater than	>
&	Ampersant	&
“	Double Quotation	"
‘	Single Quotation	'
	Non-Breaking Space	



```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11 <!-- Character Entities -->
12 <!-- &nbsp; -->
13 <h2>Lorem ipsum do&nbsp;lor, sit amet consectetur adipisicing elit. Accusantium, at!</h2>
14 <!-- &lt; &gt; -->
15 <h2>Lorem ipsum,&lt;dolor&gt;sit amet consectetur adipisicing elit. Consectetur, eaque.</h2>
16 <!-- &amp; -->
17 <h2>Lorem ipsum &amp;dolor sit amet consectetur adipisicing elit. Vero, quaerat!</h2>
18 <!-- &quot; -->
19 <h2>Lorem ipsum &quot;dolor sit amet consectetur adipisicing elit. Vero, quaerat!</h2>
20 <!-- &apos; -->
21 <h2>Lorem ipsum &apos;dolor sit amet consectetur adipisicing elit. Vero, quaerat!</h2>
22 </body>
23 </html>
```

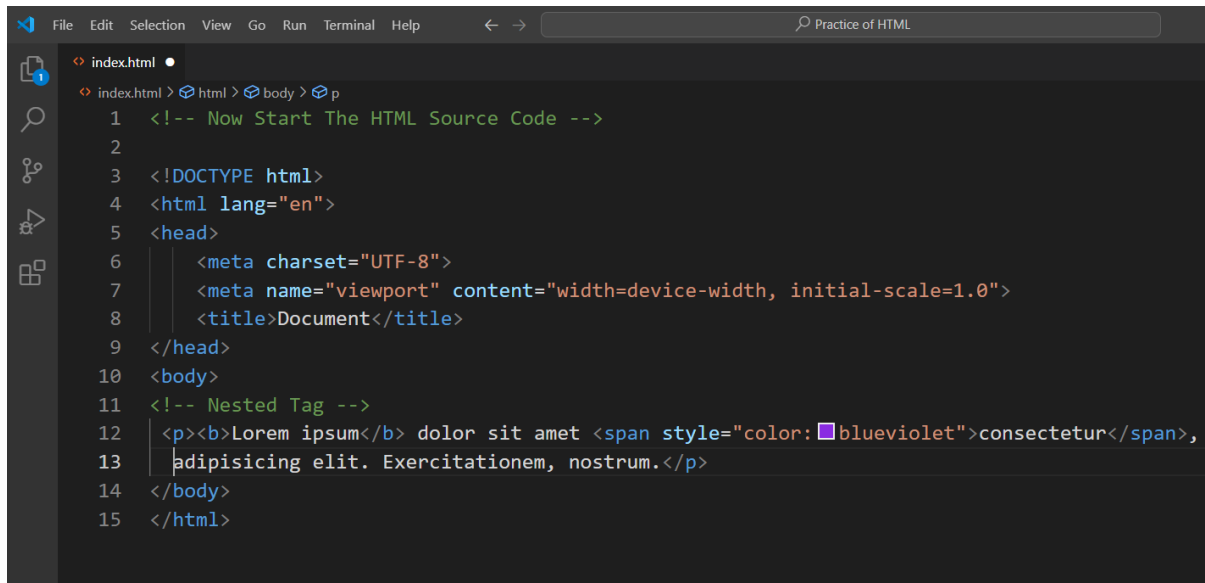
Output:



Nested Tags

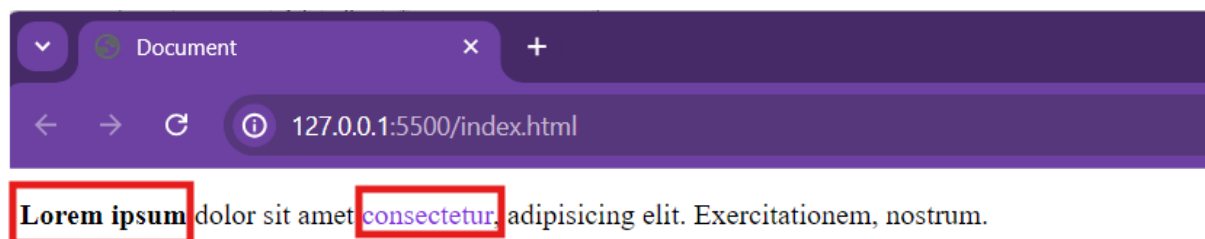
(i) Nested tag means tag inside tag.

(ii) It is used for performing different functionality to a particular code of content.



```
index.html
index.html > html > body > p
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11 <!-- Nested Tag -->
12 <p><b>Lorem ipsum</b> dolor sit amet <span style="color: blueviolet">consectetur</span>,
13   adipiscing elit. Exercitationem, nostrum.</p>
14 </body>
15 </html>
```

Output:

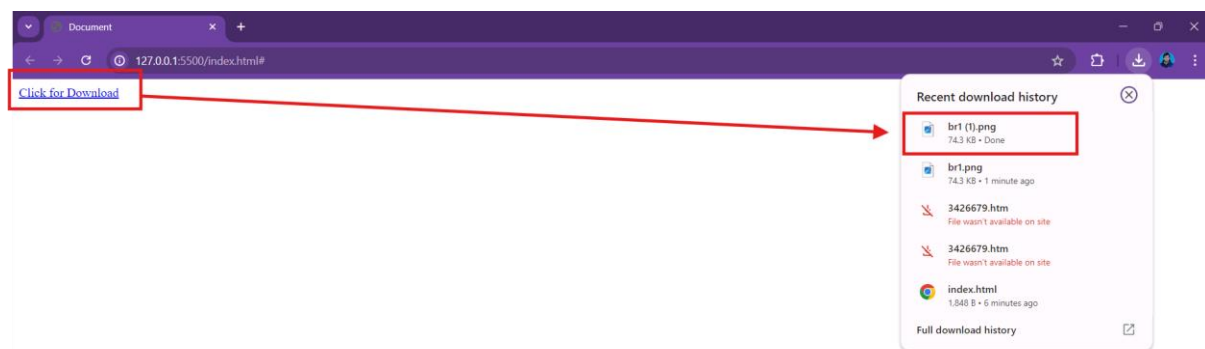


Use of Download Attribute

- (i) Download attribute are used for **download** any time of content through webpage.
- (ii) It's mainly used for downloading videos, images, songs etc.

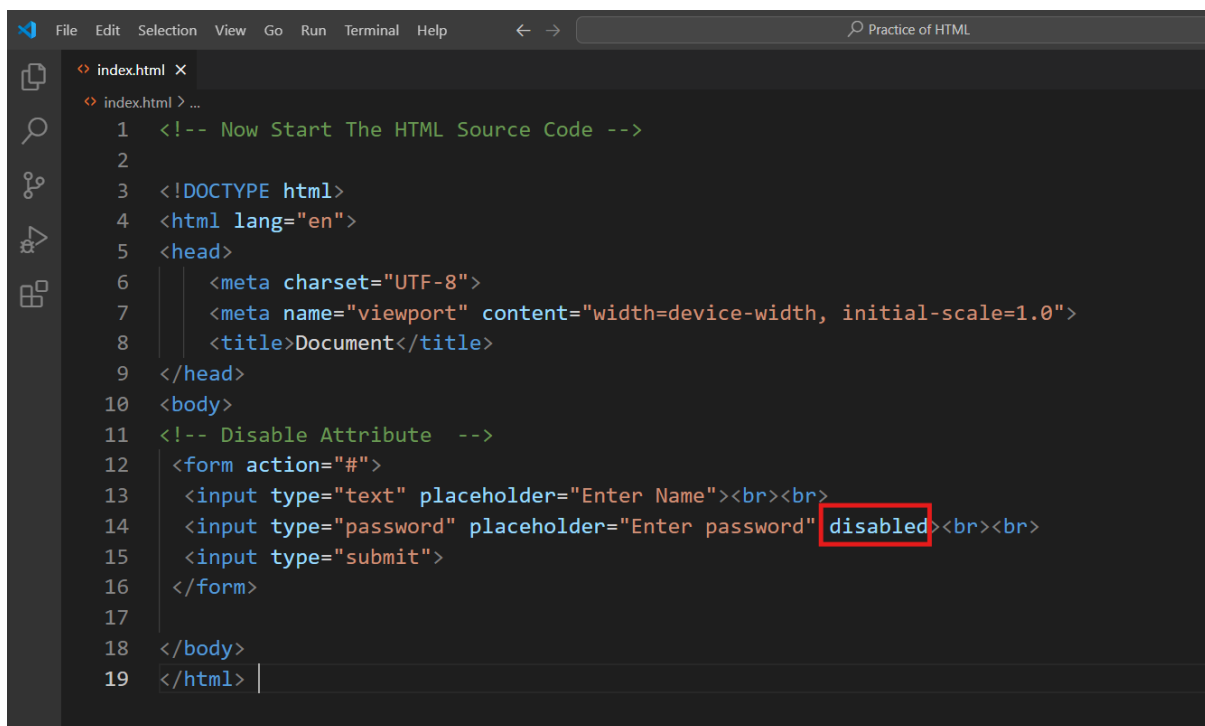
```
index.html x
index.html > html > body > a
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11 <!-- Download Attribute -->
12
13 <a href="br1.png" download>Click for Download</a>
14 </body>
15 </html>
```

Output:



Use of Disable Attribute

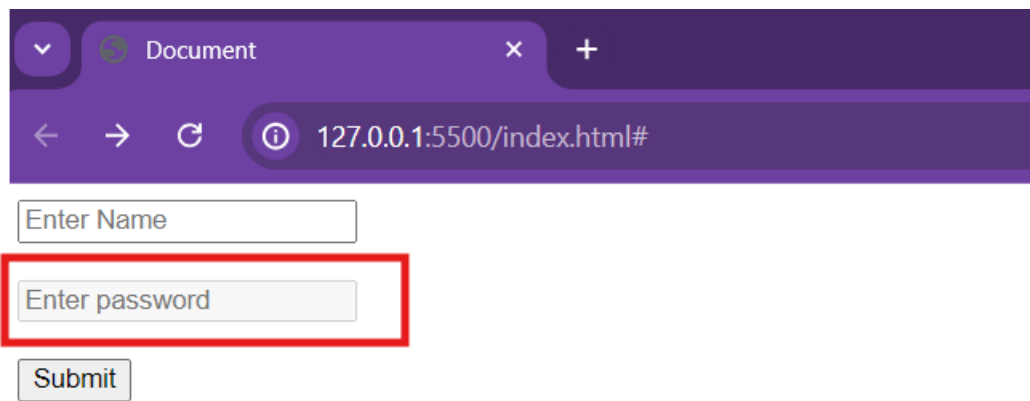
- (i) Disable attribute is used for non-working content.
- (ii) Content are not working on webpage after use disable attribute.
- (iii) It's mainly used for input fields.



```
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11 <!-- Disable Attribute -->
12 <form action="#">
13   <input type="text" placeholder="Enter Name"><br><br>
14   <input type="password" placeholder="Enter password" disabled><br><br>
15   <input type="submit">
16 </form>
17
18 </body>
19 </html>
```

The screenshot shows a code editor with a dark theme. The file is named 'index.html'. The code is an HTML document with a form. The password input field is highlighted with a red box and the word 'disabled' is written next to it. The code is as follows:

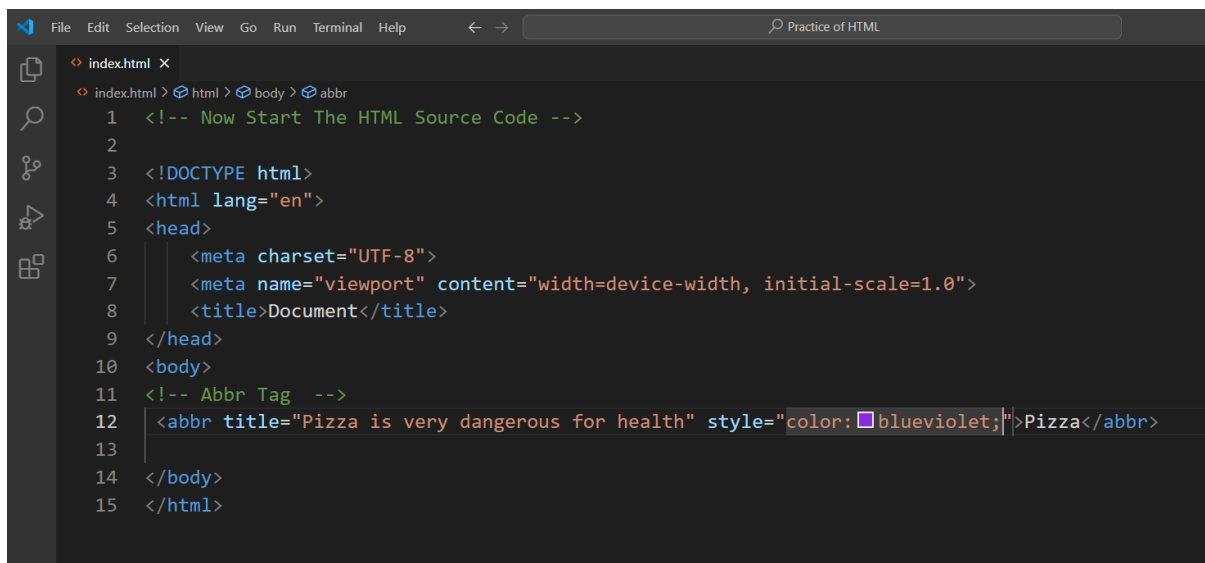
Output:



A screenshot of a web browser window. The address bar shows the URL `127.0.0.1:5500/index.html#`. Below the address bar, there is a form with three elements: a text input field labeled "Enter Name", a text input field labeled "Enter password" (which is highlighted with a red rectangular border), and a "Submit" button.

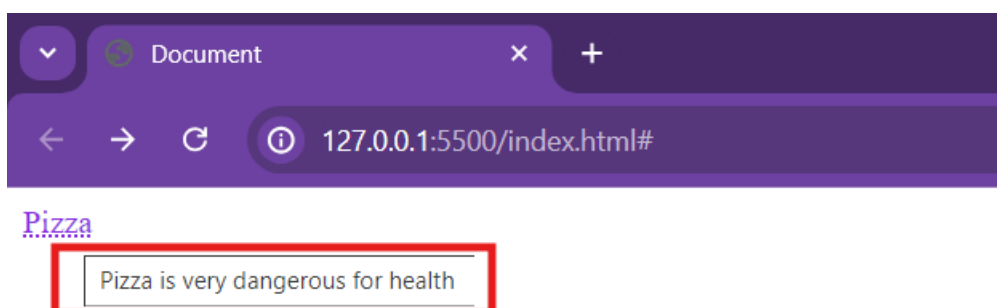
Abbreviation Tag

- (i) Abbreviation tag is used for abbreviation just like English abbreviation.
- (ii) Mainly title attribute is used in <abbr> tag.
- (iii) Those word or sentence are used for abbreviation drop the cursor on those word or sentence for output.



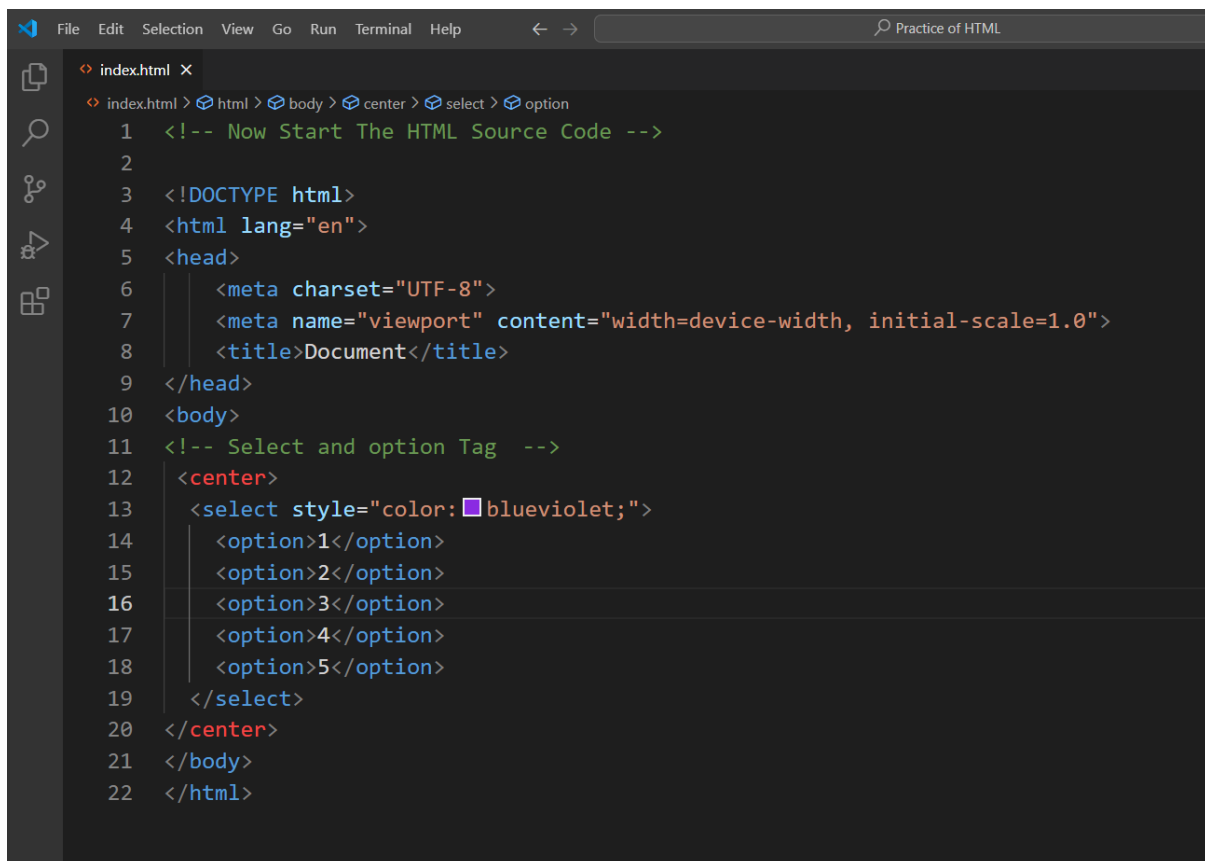
```
index.html X
index.html > html > body > abbr
1 <!-- Now Start The HTML Source Code -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6   <meta charset="UTF-8">
7   <meta name="viewport" content="width=device-width, initial-scale=1.0">
8   <title>Document</title>
9 </head>
10 <body>
11 <!-- Abbr Tag -->
12 <abbr title="Pizza is very dangerous for health" style="color: blueviolet;">Pizza</abbr>
13
14 </body>
15 </html>
```

Output:



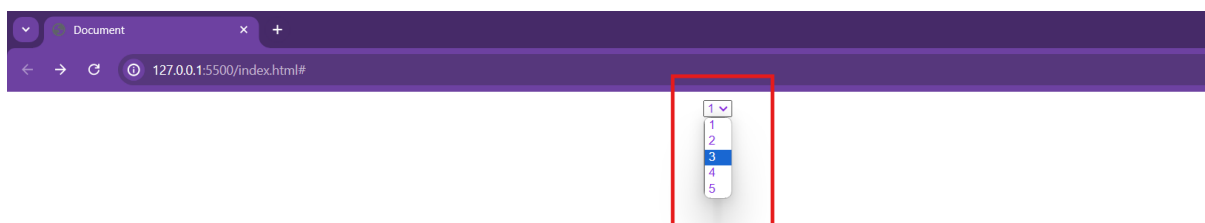
Select and Option Tag

- (i) Select and option tag are very important for make any type of form related webpage.
- (ii) It's work just like list but in selection way; user easily select our choice to fill form.



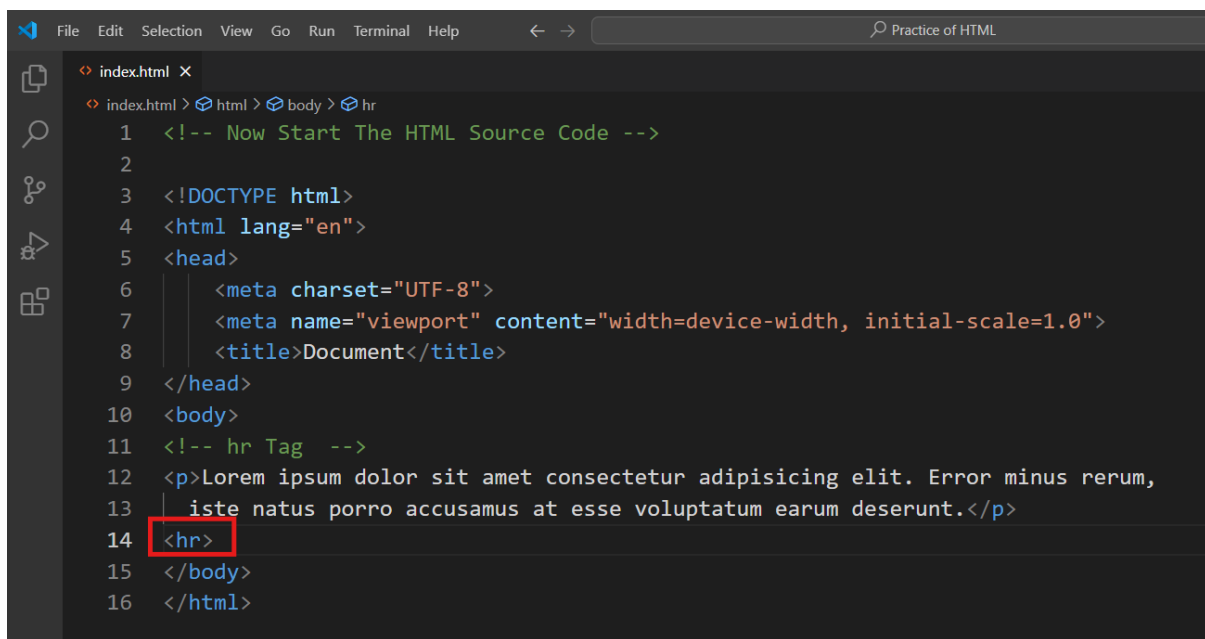
```
index.html x
index.html > html > body > center > select > option
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11 <!-- Select and option Tag -->
12 <center>
13     <select style="color: blueviolet;">
14         <option>1</option>
15         <option>2</option>
16         <option>3</option>
17         <option>4</option>
18         <option>5</option>
19     </select>
20 </center>
21 </body>
22 </html>
```

Output:



HR Tag

- (i)HR tag is used for give horizontal line in webpage.
- (ii)Customization in HR tag is available.
- (iii)It is a unpaired tag.



```
index.html x
index.html > html > body > hr
1  <!-- Now Start The HTML Source Code -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6      <meta charset="UTF-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1.0">
8      <title>Document</title>
9  </head>
10 <body>
11 <!-- hr Tag -->
12 <p>Lorem ipsum dolor sit amet consectetur adipisicing elit. Error minus rerum,
13     iste natus porro accusamus at esse voluptatum earum deserunt.</p>
14 <hr>
15 </body>
16 </html>
```

Output:

