GETTING STARTED

WITH HTML AND EMMET

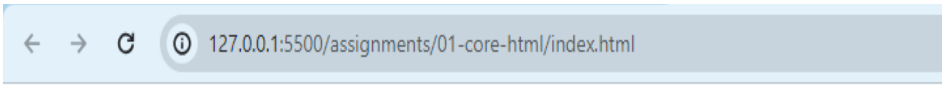
ASSIGNMENT

1. **Write a simple program in HTML that displays the heading "I'm happy to learn Web Development" on the web browser.**

   For displaying headings, we use heading tags in HTML (h1,h2,h3,h4,h5,h6).

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Displaying headings</title>
</head>
<body>
    <h1>I'm happy to learn Web Development</h1>
</body>
</html>
```

Output :

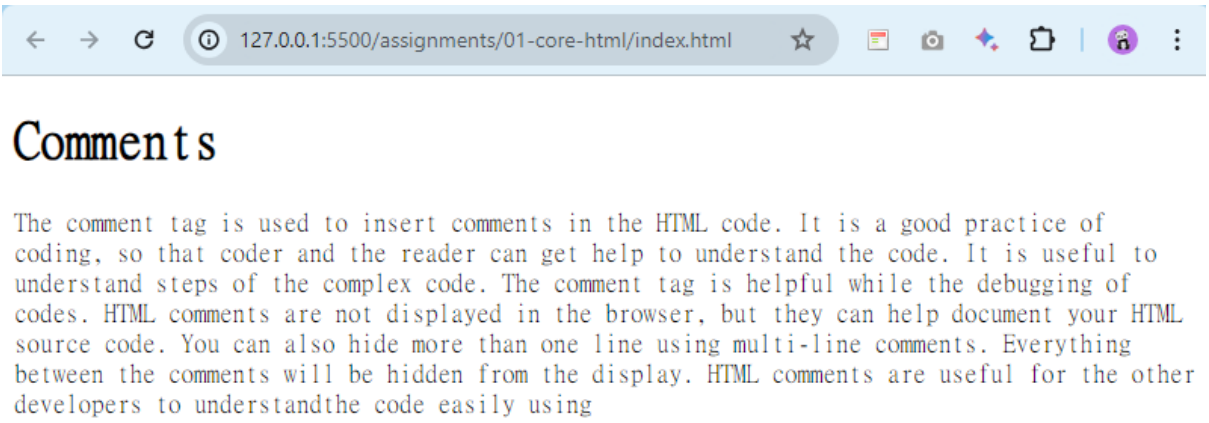


I'm happy to learn Web Development

2. **Write a simple program in HTML , the webpage must contain the heading “comments” and below the heading add some informations about comments. The webpage must be rendered on the browser as below image.**

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Comments</title>
</head>

<body>
    <h1>Comments</h1>
    <p>
        The comment tag is used to insert comments in the
HTML code. It is a good practice of coding, so that coder
and the reader can get help to understand the code. It is
useful to understand steps of the complex code. The comment
tag is helpful while the
        debugging of codes. HTML comments are not displayed
in the browser, but they can help document your HTML source
code. You can also hide more than one line using multi-line
comments. Everything between the comments will be hidden
from the display.
        HTML comments are useful for the other developers to
understand the code easily using the description provided in
comments. HTML comments uses a single type of syntax to
comment single line as well as multiple lines of code.
    </p>
</body>

</html>
```

Output :



3. **Write a short note on tags, elements and attributes along with relevant examples.**

HTML Tags :

Tags are the names of the elements. They are used to identify the type of element that you are creating . An opening and closing tags makes a complete element, however, you can also use self-closing tags. Self-closing tags are used to create elements that don't contain content. Ex:- `<br />`

Here's a look at the syntax of any generic tag:

`<tag> the opening tag is on the left, closing tag is on the right.</tag>`

Some examples of tags:

`<a>` Tag
`<p>` Tag
`<h1>` Tag
`<div>` Tag
`<span>` Tag

HTML Elements:

Elements are the building blocks of HTML. They are the smallest units of content and we use them to build larger elements. Elements can be nested to create more complex content.

Here’s an example of an HTML element:

 This is a paragraph.

Notice that the element is surrounded by angle brackets (< and >). This element is using a tag, and its content is “This is a paragraph.”

HTML Attributes :

Attributes describe the tags that they are placed inside of. The syntax for attributes is extremely simple. A valid attribute is a name-value pair, separated by an equals sign.

I am a special heading!

In this example, class is the attribute, and special is the value.

Attributes describe tags because now this div tag might act or look differently than another div tag with another class attribute, or no class attribute at all.

The following is a generic example of how an attribute with the value can be applied to a tag.

<tag attribute = ‘value’> Generic example. </tag>

4. **List out any 3 tags we learned in the module and give the brief explanation about the tags.**

   Three tags we learned in this module are as follows-

   a. **<h1> to <h6> Heading Tags :**

      These tags are used to give headings to a webpage. It does not mean that the purpose of headings is not just to display headings, Their significance is to make better Search Engine Optimization (SEO).

   b. ** --- Paragraph Tag :**

Paragraph tag, as the name suggests, is used to create paragraph in a webpage. Paragraphs are used to explain the headings. Paragraph tags are basically used to explain information.

Paragraph tag is a block level element, it means, it takes a full width of webpage.

Ex : `<p>  Paragraph </p>`

c. --- DIV Tag:

DIV Tag is sued to group multiple HTML elements withing itself. DIV Tag acts as a container that contains various HTML Tags, HTML Elements and many more.

DIV Tag is a block level element i.e. it takes full space / width of the webpage once declared.

Ex:

```
<div>
      <h1> Heading 1 </h1>
    <h2> Heading 2 </h2>
    <p> Paragraph </p>
</div>
```

5. What is Emmet? List some of the advantages Emmet offers.

Emmet is a free add-on for text editor. It basically uses shortcuts which are then expanded into full pieces of code. Emmet allows us to write code faster using abbreviations. It can save a lot of time of the developers.

Emmet is available in most of the popular text editors as an extension, for ex, VS Code, Sublime Text, Atom, etc.

Advantages:

a. It allows us to code faster
b. It is supported in most of the popular text editors
c. It saves a lot of time and hence increases productivity
d. It results in less syntax errors

e. The abbreviations are easy to learn

e.g. If we type ‘h1’ emmet will automatically type the opening and closing tag of ‘h1’

6. Using Emmet, create another webpage similar to question 1&2.

Question1:

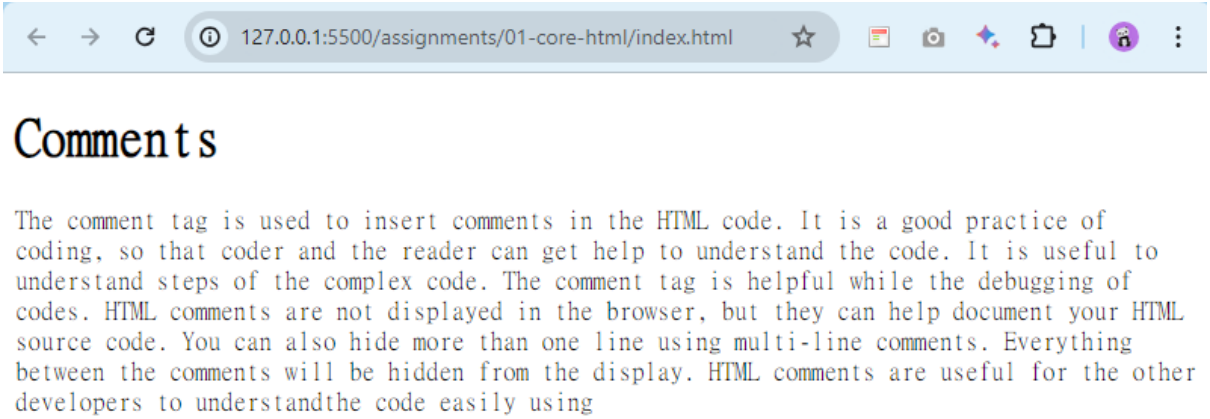
```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Question 1 using Emmet</title>
</head>
<body>
   <!-- Emmet : h1{ I'm happy to learn Web Development } -->

    <h1>I'm happy to learn Web Development</h1>
</body>
</html>
```

Output :

Question2:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title> Question 2 using Emmet </title>
</head>

<body>
    <!-- Emmet : h1{comments} -->
    <h1>Comments</h1>
    <p>
        The comment tag is used to insert comments in the
HTML code. It is a good practice of coding, so that coder
and the reader can get help to understand the code. It is
useful to understand steps of the complex code. The comment
tag is helpful while the
        debugging of codes. HTML comments are not displayed
in the browser, but they can help document your HTML source
code. You can also hide more than one line using multi-line
comments. Everything between the comments will be hidden
from the display.
        HTML comments are useful for the other developers to
understand the code easily using the description provided in
comments. HTML comments uses a single type of syntax to
comment single line as well as multiple lines of code.
    </p>
</body>

</html>
```

Output :



7. **Explain in brief about the nesting operators in Emmet.**

   Nesting operators are used to position the abbreviation elements inside generated tree. Whether it should be placed inside or near the context element.

   a. **Child : >**
      Child operator is used to nest elements inside each other.
      Ex: div>ul>li*2
      The above nesting operator creates-

```
<div>
    <ul>
        <li></li>
        <li></li>
    </ul>
</div>
```

b. Sibling : +

Sibling operator is used to place elements near each other, on same level.

Ex: `div+p`

The above operator creates –

```
<div></div>
<p></p>
```

c. Climb-up : ^

Using climb up operator we can climb one level up the tree and change context.

Ex: `div+div>p>span+em^bq`

The above operator creates –

```
<div></div>
<div>
    <p>
        <span></span>
        <em></em>
    </p>
    <blockquote></blockquote>
</div>
```

d. Grouping : ()

It is used for grouping subtree in complex abbreviations.

Ex: div>(header>ul>li*2>a)+footer>p

The above operator creates-

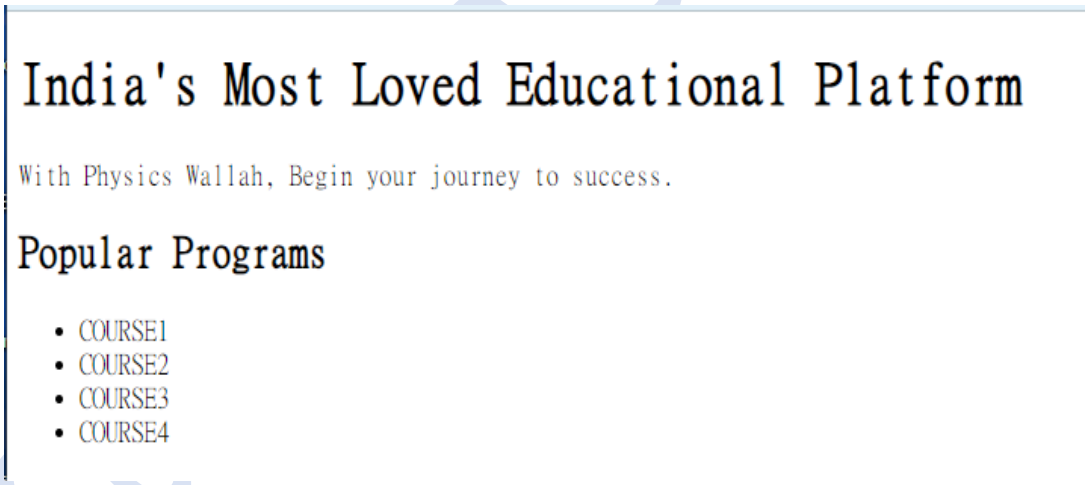
```
<div>
    <header>
        <ul>
            <li> <a href=" "></a></li>
            <li><a href=" "></a></li>
        </li>
    </header>
    <footer>
        <p> </p>
    </footer>
</div>
```

8. Build a simple webpage using any 2 Emmet abbreviations and above the elements mention Emmet abbreviations using HTML comments. The below image is for reference.

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>using emmet abbreviations</title>
</head>

<body>
    <!-- emmet : h1{India's Most Loved Educational Platform}
-->
    <h1>India's Most Loved Educational Platform</h1>
```

```
    <!-- emmet : p{With Physics Wallah, Begin your journey
to success.} -->
    <p>With Physics Wallah, Begin your journey to
success.</p>
    <!-- emmet : h2{Popular Programs} -->
    <h2>Popular Programs</h2>
    <!-- emmet : ul>li{COURSE$}*4 -->
    <ul>
        <li>COURSE1</li>
        <li>COURSE2</li>
        <li>COURSE3</li>
        <li>COURSE4</li>
    </ul>
</body>

</html>
```

OUTPUT:



9. **What are self-closing tags? Write a brief on meta tags.**

   A self-closing tag in HTML is basically a tag that does not need to be closed manually.

   Self-closing tags does not have separate closing tags.

   Some tags like <img>,
,<meta> does not have a separate closing tag i.e. these tags can be called as self-closing tags.

Meta Tags :

Meta tags are placed in the head section of the HTML document. Meta tags does not visually appear on the webpage but, these tags have a lot of significance. Meta tags are used to describe the document in brief.

Meta tags contain information like Title, Description, Keywords and Author. These tags are definitely responsible for better search engine optimization of website i.e. SEO

```
<meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>using emmet abbreviations</title>
    <meta http-equiv="X-UA-Compatibe" content="IE-edge" />
```

10. What are global attributes? List any 5 Global Attributes.

Global attributes-

Global attributes are attributes common to all HTML elements; they can be used on all HTML elements, though they may have no effect on some elements.

List of Global Attributes-

a. **Title :**
   Title contains a space that represents information related to webpage it belongs to. This information is used by browsers to render webpages accordingly.

b. **Style :**
   It contains CSS styling declarations that are going to be applied on the element. Styles are defined in different files.

c. **Lang :**

It helps define the language of HTML element. It is defined within HTML , tag itself.

d. **ID :**

It defines the unique identifier (ID) which must be unique in whole document.

e. **Hidden :**

This global attribute is used to hide elements which can’t be used until the login process is completed. Browser don’t render content of such elements containing ‘hidden’ global attribute.

CORE HTML

ASSIGNMENT

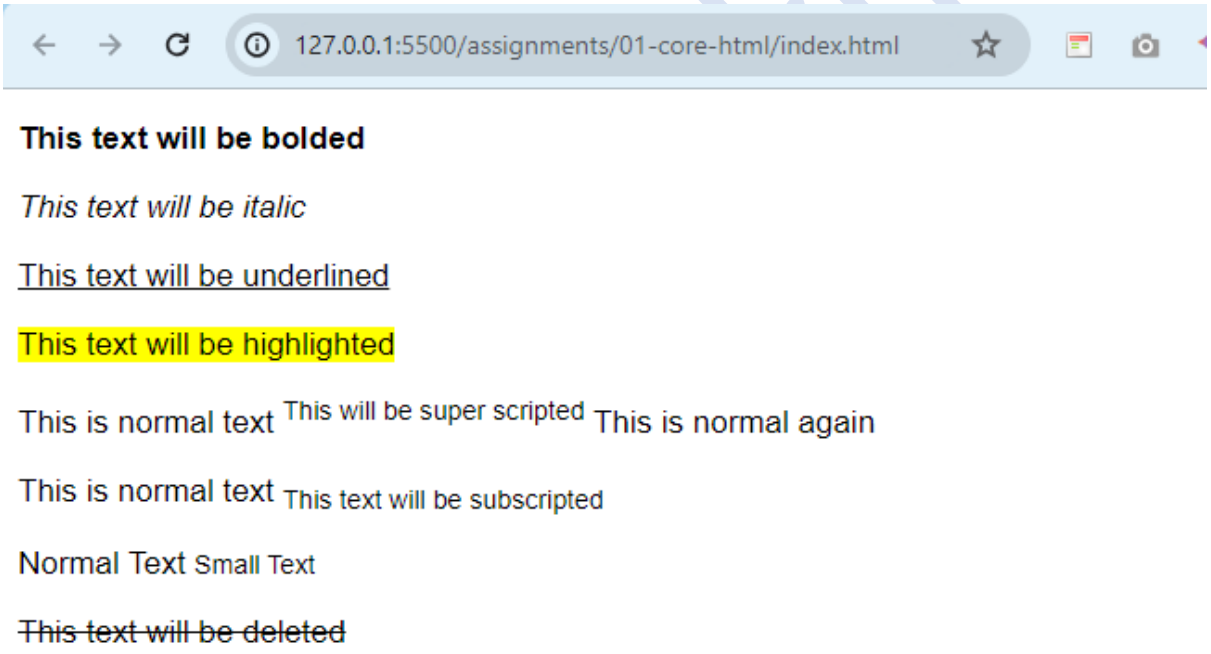
1. **Build a webpage that displays text as shown in the below image.**

   Code-

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>question-01</title>
    <meta http-equiv="X-UA-Compatibe" content="IE-edge" />
    <style>
        body {
            font-family: Arial, Helvetica, sans-serif;
        }
    </style>
</head>

<body>
    <p><b>This text will be bolded</b></p>
    <p><em>This text will be italic</em></p>
    <p><u>This text will be underlined</u></p>
    <p>
        <mark>This text will be highlighted</mark>
    </p>
    <p>This is normal text <sup>This will be super
scripted</sup> This is normal again</p>
```

```
    <p>This is normal text <sub>This text will be
subscripted</sub></p>
    <p>Normal Text <small>Small Text</small></p>
    <p><del>This text will be deleted</del></p>
</body>

</html>
```

Output :



2. **Build a simple webpage that displays the table as shown below.**

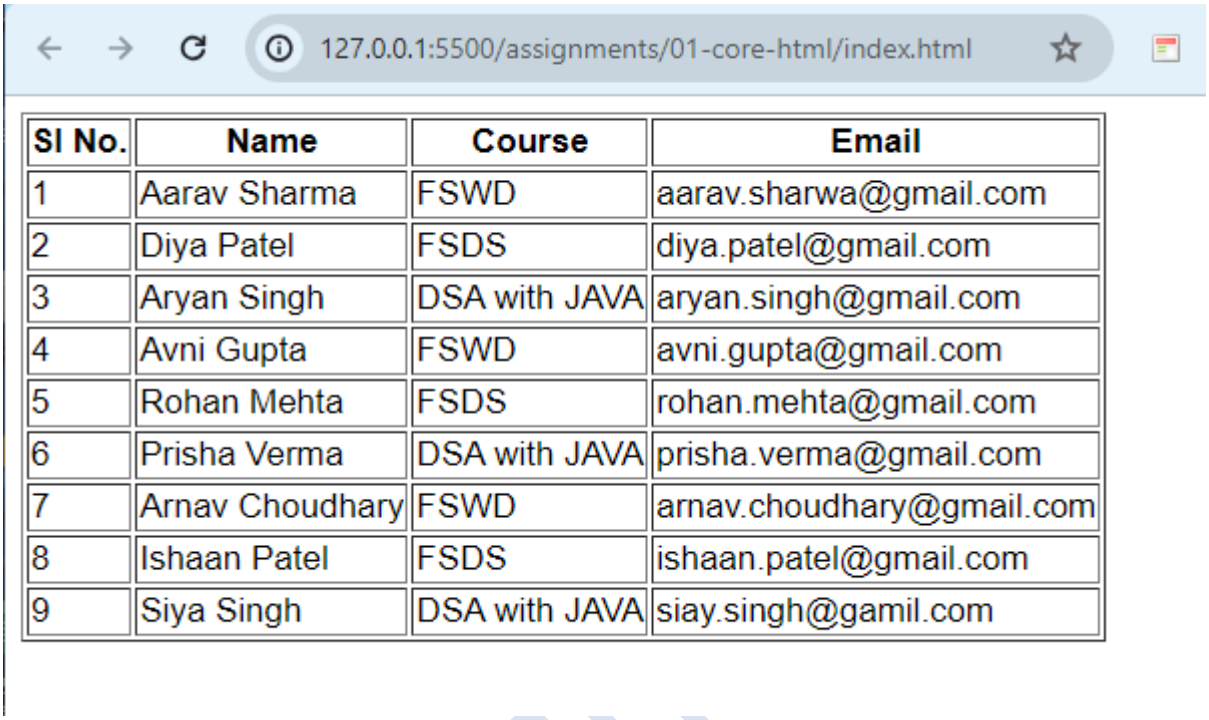
   Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>question-01</title>
    <meta http-equiv="X-UA-Compatibe" content="IE-edge" />
    <style>
```

```
        body {
            font-family: Arial, Helvetica, sans-serif;
        }
    </style>
</head>

<body>
    <table border="1">
        <thead>
            <tr>
                <th>SI No.</th>
                <th>Name</th>
                <th>Course</th>
                <th>Email</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>1</td>
                <td>Aarav Sharma</td>
                <td>FSWD</td>
                <td>aarav.sharwa@gmail.com</td>
            </tr>
            <tr>
                <td>2</td>
                <td>Diya Patel</td>
                <td>FSDS</td>
                <td>diya.patel@gmail.com</td>
            </tr>
            <tr>
                <td>3</td>
                <td>Aryan Singh</td>
                <td>DSA with JAVA</td>
                <td>aryan.singh@gmail.com</td>
            </tr>
            <tr>
                <td>4</td>
                <td>Avni Gupta</td>
```

```
                <td>FSWD</td>
                <td>avni.gupta@gmail.com</td>
            </tr>
            <tr>
                <td>5</td>
                <td>Rohan Mehta</td>
                <td>FSDS</td>
                <td>rohan.mehta@gmail.com</td>
            </tr>
            <tr>
                <td>6</td>
                <td>Prisha Verma</td>
                <td>DSA with JAVA</td>
                <td>prisha.verma@gmail.com</td>
            </tr>
            <tr>
                <td>7</td>
                <td>Arnav Choudhary</td>
                <td>FSWD</td>
                <td>arnav.choudhary@gmail.com</td>
            </tr>
            <tr>
                <td>8</td>
                <td>Ishaan Patel</td>
                <td>FSDS</td>
                <td>ishaan.patel@gmail.com</td>
            </tr>
            <tr>
                <td>9</td>
                <td>Siya Singh</td>
                <td>DSA with JAVA</td>
                <td>siay.singh@gamil.com</td>
            </tr>
        </tbody>
    </table>
</body>

</html>
```

Output :



Sl No.	Name	Course	Email
1	Aarav Sharma	FSWD	aarav.sharwa@gmail.com
2	Diya Patel	FSDS	diya.patel@gmail.com
3	Aryan Singh	DSA with JAVA	aryan.singh@gmail.com
4	Avni Gupta	FSWD	avni.gupta@gmail.com
5	Rohan Mehta	FSDS	rohan.mehta@gmail.com
6	Prisha Verma	DSA with JAVA	prisha.verma@gmail.com
7	Arnav Choudhary	FSWD	arnav.choudhary@gmail.com
8	Ishaan Patel	FSDS	ishaan.patel@gmail.com
9	Siya Singh	DSA with JAVA	siay.singh@gamil.com

3. Build a simple webpage that displays the table shown below

Code –

```
    <!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>question-01</title>
    <meta http-equiv="X-UA-Compatibe" content="IE-edge" />
    <style>
        body {
            font-family: Arial, Helvetica, sans-serif;
        }
    </style>
</head>

<body>
```

```
<table border="2">
    <tbody>
        <thead>
            <tr>
                <td>Product</td>
                <td colspan="2">Flavours & Quantity</td>
            </tr>
        </thead>
        <tr>
            <td colspan="3">Diary</td>
        </tr>
        <tr>
            <td rowspan="4">Ice Creams</td>
        </tr>
        <tr>
            <td>Vanilla</td>
            <td>500g</td>
        </tr>
        <tr>
            <td>Chocolate</td>
            <td>250g</td>
        </tr>
        <tr>
            <td>Butter Scotch</td>
            <td>1kg</td>
        </tr>
        <tr>
            <td colspan="3">Beverages</td>
        </tr>
        <tr>
            <td rowspan="4">Soda</td>
        </tr>
        <tr>
            <td>Cola</td>
            <td>0.5 L</td>
        </tr>
        <tr>
            <td>Orange</td>
```

```
                <td>1 L</td>
            </tr>
            <tr>
                <td>Lime</td>
                <td>2 L</td>
            </tr>
        </tbody>
    </table>
</body>

</html>
```

Output:

Product	Flavours & Quantity	
Diary		
Ice Creams	Vanilla	500g
	Chocolate	250g
	Butter Scotch	1kg
Beverages		
Soda	Cola	0.5 L
	Orange	1 L
	Lime	2 L

4. **Build a simple blog web page with 3 pages, home, web development, and web design. Each page must contain hyperlinks to other pages in the top, a heading of the page topic and a paragraph of information. For home page you can add some information about yourself.**

Code –

Page 01 :

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Home Page</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }

        .links {
            display: inline-block;
            border: 2px solid black;
            padding: 10px;
        }

        .links>a {
            text-decoration: none;
            margin: 5px 10px;
        }
    </style>
</head>

<body>
    <span class="links">
```

```
        <a href="./index.html">Home Page</a> |
        <a href="./webDeve.html">Web Development Page</a> |
        <a href="./web_design.html">Web Design Page</a>
    </span>
    <div>
        <h1>Sumaiya Shaikh</h1>
        <p>
            Hi! I'm Sumaiya. I'm currently pursuing my
Bachelor's degree in computer science although I've taken
couple years of break from academic studies .ButI've started
learning Full-Stack Web Development at PWSkills.
        </p>
    </div>
</body>

</html>
```

Page 02:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Web Development Page</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }

        .links {
            display: inline-block;
            border: 2px solid black;
            padding: 10px;
        }
```

```
        .links>a {
            text-decoration: none;
            margin: 5px 10px;
        }
    </style>
</head>

<body>
    <span class="links">
        <a href="./index.html">Home Page</a> |
        <a href="./webDeve.html">Web Development Page</a> |
        <a href="./web_design.html">Web Design Page</a>
    </span>
    <div>
        <h1>Web Development</h1>
        <p>Lorem ipsum, dolor sit amet consectetur
adipisicing elit. Cupiditate eum consequuntur pariatur sit,
temporibus cum neque hic, adipisci omnis dolore, sequi
sapiente placeat officiis ex commodi error cumque ab quae
veritatis? Iste distinctio ex
            doloribus nulla quis ducimus modi beatae, rem
saepe, quidem nisi tenetur quasi iusto dolorem impedit. Odio
fuga nemo enim quibusdam ea sed magni esse obcaecati
expedita autem, iste dicta architecto eaque accusamus
perferendis pariatur at aliquam
            earum alias deleniti id. Sunt beatae mollitia
aliquam suscipit consequuntur ut tempora reiciendis saepe
fugiat rerum ex voluptatem id sint, consequatur est facere
obcaecati culpa error? Accusantium quas aspernatur quia.</p>
    </div>
</body>

</html>
```

Page 03:

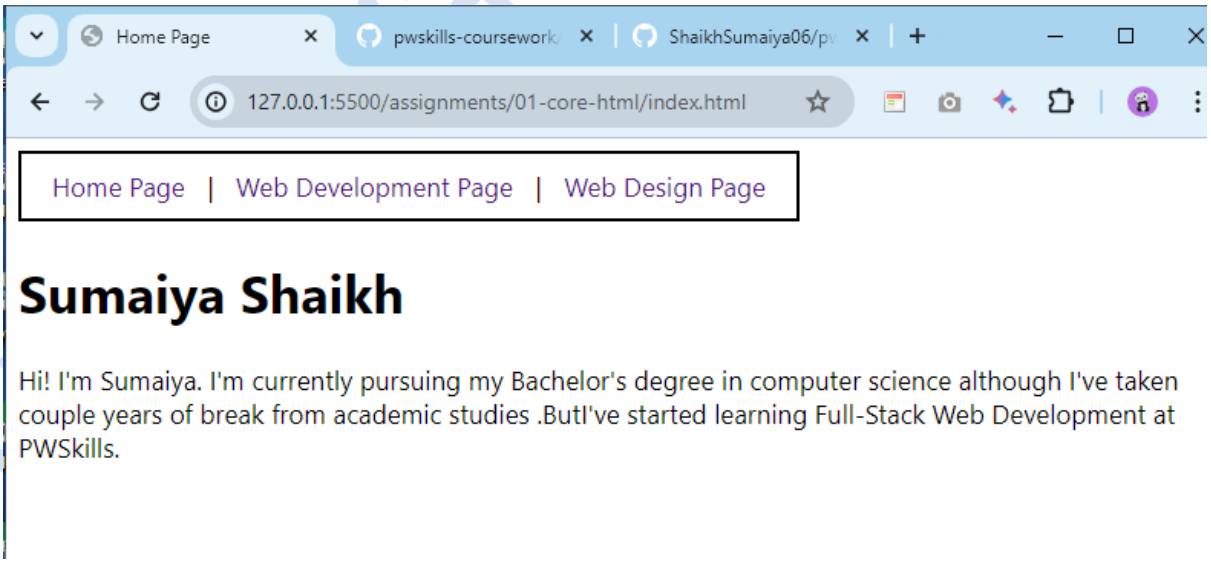
```
<!DOCTYPE html>
<html lang="en">
```

```
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Web Design Page</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }

        .links {
            display: inline-block;
            border: 2px solid black;
            padding: 10px;
        }

        .links>a {
            text-decoration: none;
            margin: 5px 10px;
        }
    </style>
</head>

<body>
    <span class="links">
        <a href="./index.html">Home Page</a> |
        <a href="./webDeve.html">Web Development Page</a> |
        <a href="./web_design.html">Web Design Page</a>
    </span>
    <div>
        <h1>Web Design</h1>
        <p>Lorem ipsum dolor sit amet consectetur
adipisicing elit. Dicta minima, distinctio voluptates fuga
illo deserunt ullam accusamus soluta quis at minus est
placeat voluptatum asperiores repellat vitae explicabo
consectetur incidunt repellendus a
```

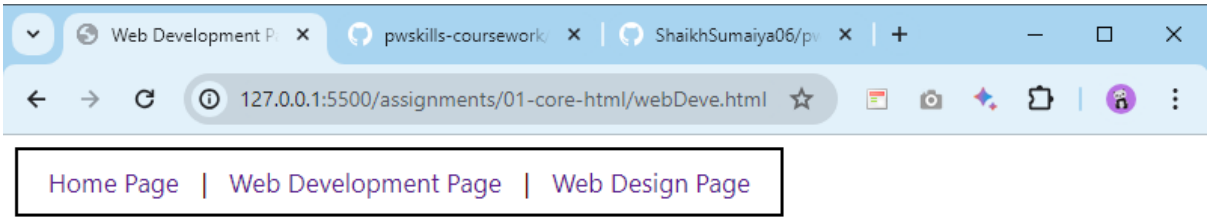
```
            dolorum aspernatur, velit delectus nam! Rem,
necessitatibus voluptate? Odio ut cumque consequatur
officiis corrupti, mollitia fuga id exercitationem
necessitatibus aspernatur officia sapiente expedita est. Sed
libero sit eum numquam ullam.
            Alias voluptatum, ratione assumenda veritatis
nisi ipsa, explicabo impedit facere provident, tempore
beatae. Laudantium nostrum officiis facilis porro soluta
modi aut quo minima laboriosam possimus error quidem
incidunt repellat consequuntur
            earum ducimus amet tenetur aperiam, libero, enim
ab.</p>
    </div>
</body>

</html>
```

Output:

Page 01:



Page 02:



Home Page | Web Development Page | Web Design Page

Web Development

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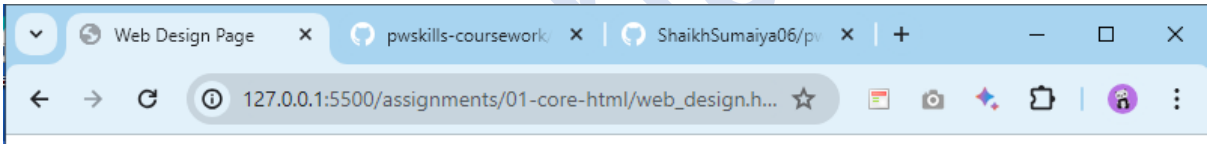
Page 03:



Home Page | Web Development Page | Web Design Page

Web Design

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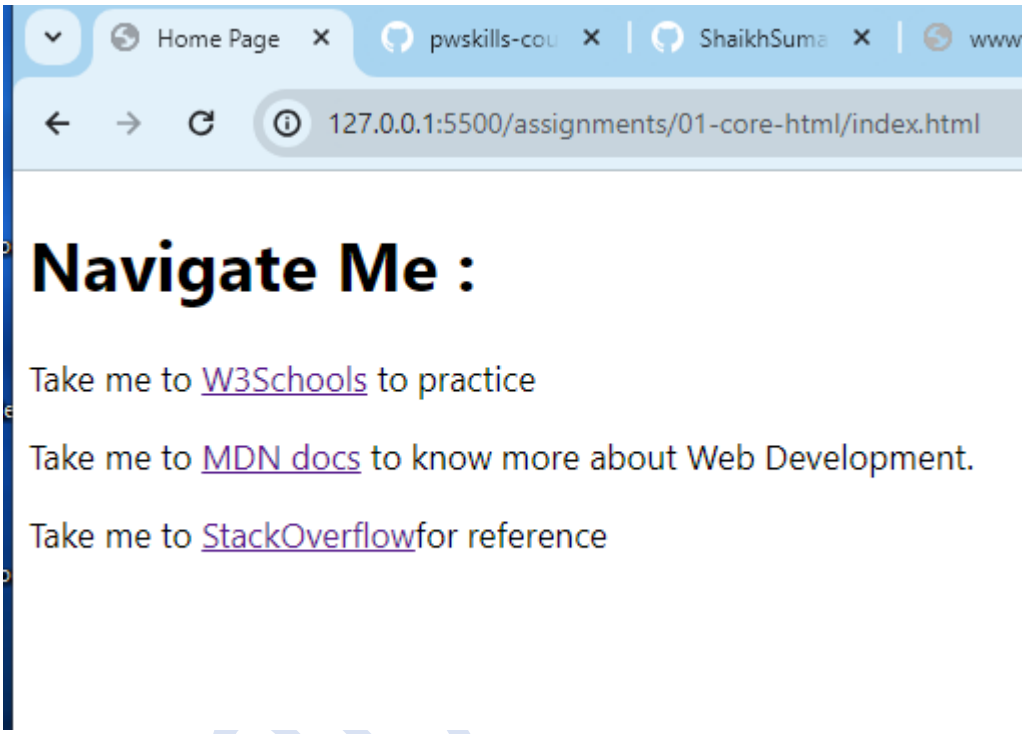
5. **Build a simple webpage that helps users navigate different web development-related websites.**
   Note: On clicking the hyperlink the webpages should open in a new tab. Below is a reference image.

Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Home Page</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
</head>

<body>
    <div>
        <h1>Navigate Me :</h1>
        <p>Take me to
            <a href="https://www.w3schools.com/"
target="_blank"> W3Schools</a> to practice
        </p>
        <p>Take me to
            <a href="https://developer.mozilla.org/en-US/"
target="_blank"> MDN docs</a> to know more about Web
Development.
        </p>
        <p>Take me to
            <a href="https://stackoverflow.com/"
target="_blank"> StackOverflow</a> for reference
```

```
        </p>
    </div>
</body>

</html>
```

Output:



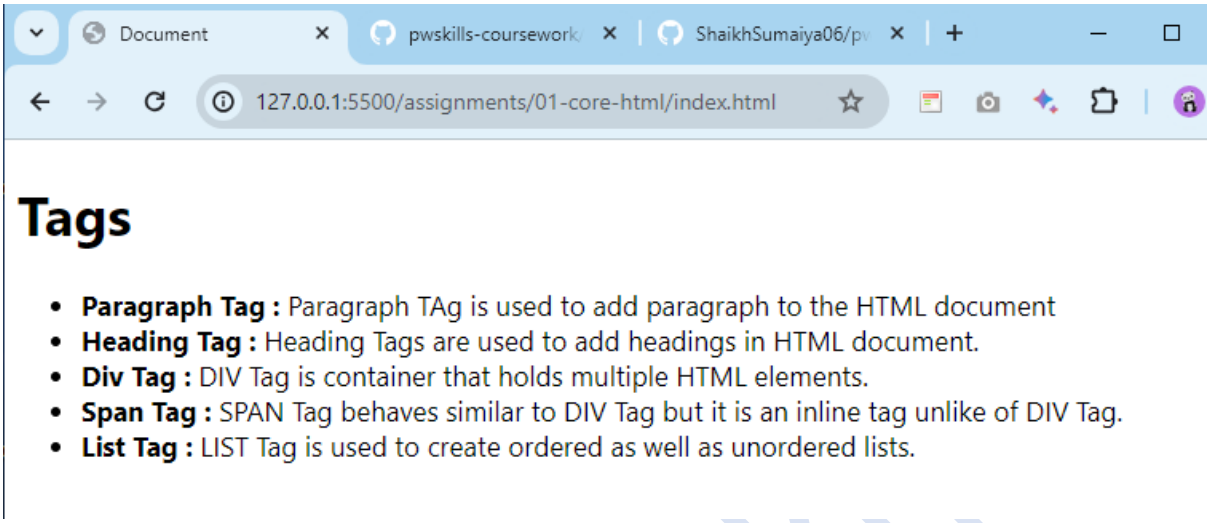
6. **Create an ordered list of HTML tags. Each list item must include the tag name and some information about the tag.**

Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <style>
        body {
```

```
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
</head>

<body>
    <div>
        <h1>Tags</h1>
        <ul>
            <li>
                <b>Paragraph Tag : </b>Paragraph TAg is used
to add paragraph to the HTML document
            </li>
            <li>
                <b>Heading Tag : </b>Heading Tags are used
to add headings in HTML document.
            </li>
            <li>
                <b>Div Tag : </b>DIV Tag is container that
holds multiple HTML elements.
            </li>
            <li>
                <b>Span Tag : </b>SPAN Tag behaves similar
to DIV Tag but it is an inline tag unlike of DIV Tag.
            </li>
            <li>
                <b>List Tag : </b> LIST Tag is used to
create ordered as well as unordered lists.
            </li>
        </ul>
    </div>
</body>

</html>
```

Output:



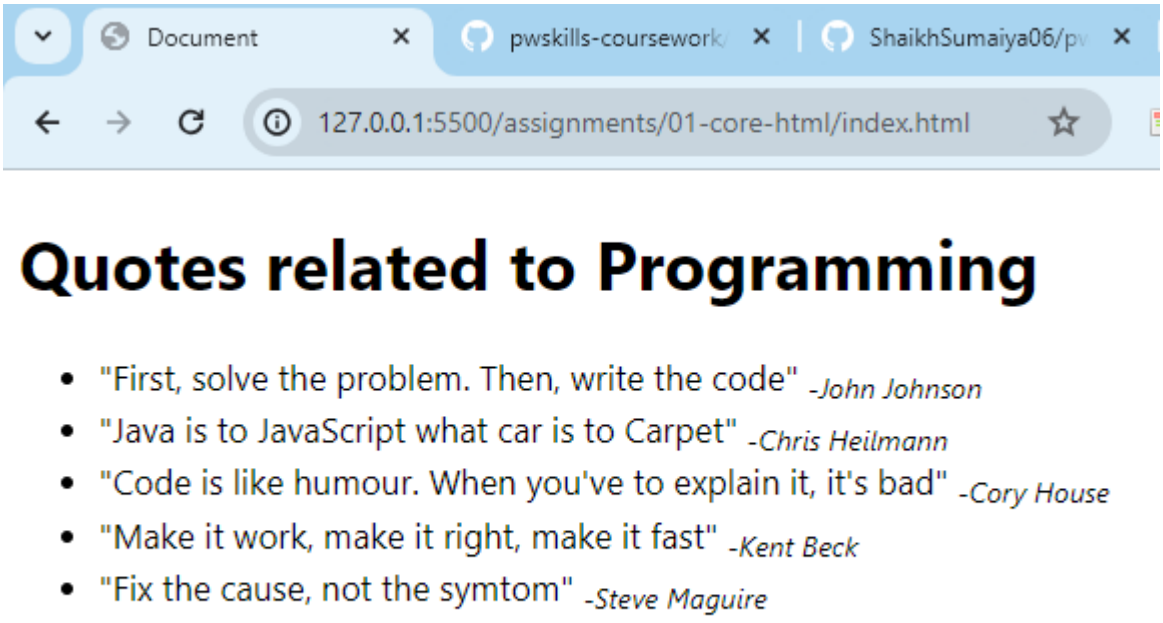
7. **Create an unordered list of 5 programming quotes, using the <ul> tag.**

Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
</head>

<body>
    <h1>Quotes related to Programming</h1>
    <ul>
        <li>
            "First, solve the problem. Then, write the code"
```

```
            <sub> -<i>John Johnson</i></sub>
        </li>
        <li>
            "Java is to JavaScript what car is to Carpet"
            <sub> -<i>Chris Heilmann</i></sub>

        </li>
        <li>
            "Code is like humour. When you've to explain it,
it's bad"
            <sub> -<i>Cory House</i></sub>

        </li>
        <li>
            "Make it work, make it right, make it fast"
            <sub> -<i>Kent Beck</i></sub>

        </li>
        <li>
            "Fix the cause, not the symtom"
            <sub> -<i>Steve Maguire</i></sub>

        </li>
    </ul>
</body>

</html>
```

Output:



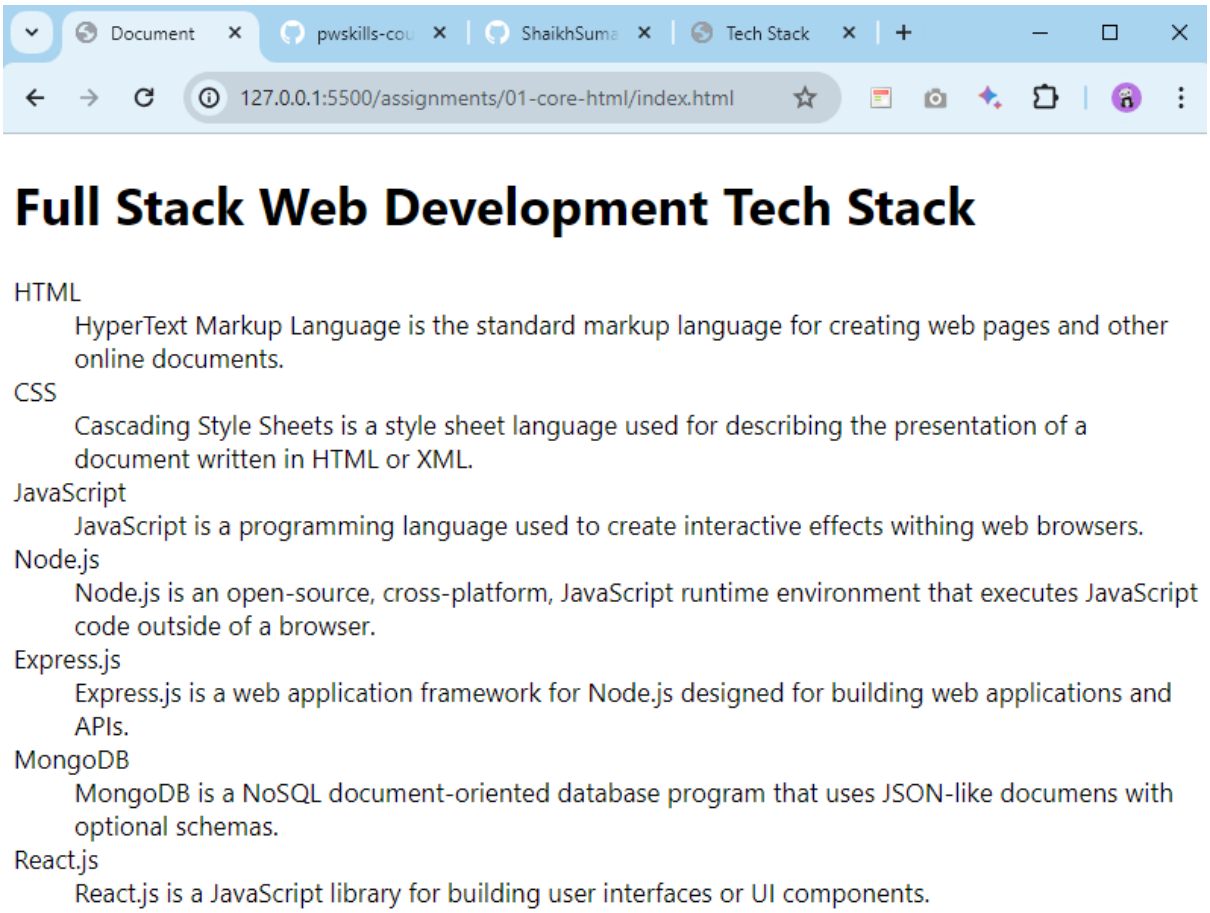
8. **Create a description list of full stack web development tech stack, using the <dl> tag. Each term should be a tech stack name and each description should be a brief explanation of what the tech stack is used for.**

Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
```

```
</head>

<body>
    <h1>Full Stack Web Development Tech Stack</h1>
    <dl>
        <dt>HTML</dt>
        <dd>
            HyperText Markup Language is the standard markup
language for creating web pages and other online documents.
        </dd>
        <dt>CSS</dt>
        <dd>Cascading Style Sheets is a style sheet language
used for describing the presentation of a document written
in HTML or XML.
        </dd>
        <dt>JavaScript</dt>
        <dd>JavaScript is a programming language used to
create interactive effects withing web browsers.</dd>
        <dt>Node.js</dt>
        <dd>Node.js is an open-source, cross-platform,
JavaScript runtime environment that executes JavaScript code
outside of a browser.</dd>
        <dt>Express.js</dt>
        <dd>Express.js is a web application framework for
Node.js designed for building web applications and
APIs.</dd>
        <dt>MongoDB</dt>
        <dd>MongoDB is a NoSQL document-oriented database
program that uses JSON-like documens with optional
schemas.</dd>
        <dt>React.js</dt>
        <dd>React.js is a JavaScript library for building
user interfaces or UI components.</dd>
    </dl>
</body>

</html>
```

Output:



9. **Create an ordered list of the most common text formatting tags in HTML. Within each list item , use unordered list to list the specific use cases and best practices for that tag.**

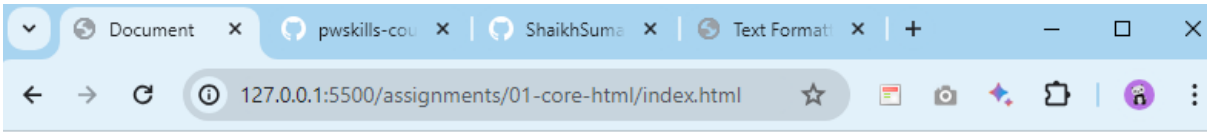
Code –

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <style>
        body {
```

```
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
</head>

<body>
    <h1>HTML Text Formatting.</h1>
    <ol>
        <li>
            <b>bold (b)</b>
            <ul>
                <li>Use to make text stand out or emphasize
a point</li>
                <li>Do not use for entire paragraphs or long
blocks of text</li>
                <li>Avoid overusing, as it can make text
difficult to read</li>
            </ul>
        </li>
        <li>
            <i>italic (i)</i>
            <ul>
                <li>Use to indicate emphasis or to
differentiate between words or phrases</li>
                <li>Can be used for book or movie titles,
foreign words or phrases, or to denote thoughts or quotes
within a sentence</li>
                <li>Avoid overusing, as it can become
distracting or lose its impact</li>
            </ul>
        </li>
        <li>
            <strong>strong</strong>
            <ul>
                <li>Use to indicate importance or
significance of text</li>
```

```
                <li>Can be used to highlight key points,
warnings, or notices</li>
                <li>Can be combined with other Formatting
tags, such as bold or italic, to create emphasis</li>
            </ul>
        </li>
        <li>
            <em>emphasis</em>
            <ul>
                <li>Similar to italic, use to indicate
emphasis or to differentiate between words or phrases</li>
                <li>Can be used for book or movie titles,
foreign words or phrases, or to denote thoughts or quotes
within a sentence</li>
                <li>Can also be used to indicate a change in
tone or mood</li>
            </ul>
        </li>
        <li>
            <u>underline</u>
            <ul>
                <li>Use to emphasize a single word or
phrase</li>
                <li>Avoid using for entire blocks of text,
as it can make it difficult to read</li>
                <li>Consider using bold or italic instead
for emphasis</li>
            </ul>
        </li>
    </ol>

</body>

</html>
```

Output:



HTML Text Formatting.

1. **bold (b)**
   - Use to make text stand out or emphasize a point
   - Do not use for entire paragraphs or long blocks of text
   - Avoid overusing, as it can make text difficult to read
2. *italic (i)*
   - Use to indicate emphasis or to differentiate between words or phrases
   - Can be used for book or movie titles, foreign words or phrases, or to denote thoughts or quotes within a sentence
   - Avoid overusing, as it can become distracting or lose its impact
3. **strong**
   - Use to indicate importance or significance of text
   - Can be used to highlight key points, warnings, or notices
   - Can be combined with other Formatting tags, such as bold or italic, to create emphasis
4. *emphasis*
   - Similar to italic, use to indicate emphasis or to differentiate between words or phrases
   - Can be used for book or movie titles, foreign words or phrases, or to denote thoughts or quotes within a sentence
   - Can also be used to indicate a change in tone or mood
5. underline
   - Use to emphasize a single word or phrase
   - Avoid using for entire blocks of text, as it can make it difficult to read
   - Consider using bold or italic instead for emphasis

10. Create an ordered list of the full stack web development tech stack HTML, CSS and JavaScript. For each tech stack, create a table that lists the tech stack name, its primary uses cases, and some key features and benefits. Below is a reference image.

Code –

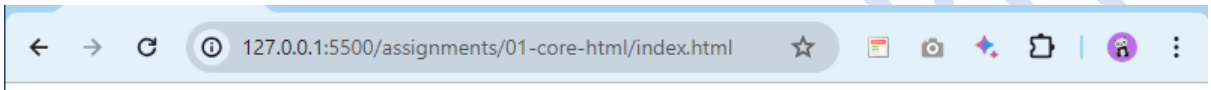
```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
```

```
    <title>Document</title>
    <style>
        body {
            font-family: 'Segoe UI', Tahoma, Geneva,
Verdana, sans-serif;
        }
    </style>
</head>

<body>
    <table border="3">
        <caption><b>HTML</b></caption>
        <thead>
            <tr>
                <td>Primary Use Case</td>
                <td>Key Features/benefits/</td>
            </tr>
        </thead>
        <tr>
            <td>Building the structure of web pages</td>
            <td>
                <ul>
                    <li>Simple and easy to learn</li>
                    <li>Compatible with all web
browsers</li>
                    <li>Allows for semantic markup</li>
                </ul>
            </td>
        </tr>
    </table>
    <br><br>
    <table border="3">
        <caption><b>CSS</b></caption>
        <thead>
            <tr>
                <td>Primary Use Case</td>
                <td>Key Features/benefits/</td>
            </tr>
```

```
        </thead>
        <tbody>
            <tr>
                <td>Styling and layout of web pages</td>
                <td>
                    <ul>
                        <li>Allows for separation of content
and presentation</li>
                        <li>Enables responsive design</li>
                        <li>Offers a wide range of styling
options</li>
                    </ul>
                </td>
            </tr>
        </tbody>
    </table>
    <br><br>
    <table border="3">
        <caption><b>JavaScript</b></caption>
        <thead>
            <tr>
                <td>Primary Use Case</td>
                <td>Key Features/benefits/</td>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>Adding interactivity and functionality
to web pages</td>
                <td>
                    <ul>
                        <li>Can manipulate and modify web
page content in real-time</li>
                        <li>Offers a wide range of
functionality through libraries and frameworks</li>
                        <li>Allows  for server-side
scripting with Node.js</li>
                    </ul>
```

```
                </td>
            </tr>
        </tbody>
    </table>
</body>

</html>
```

Output:



HTML

Primary Use Case	Key Features/benefits/
Building the structure of web pages	• Simple and easy to learn • Compatible with all web browsers • Allows for semantic markup

CSS

Primary Use Case	Key Features/benefits/
Styling and layout of web pages	• Allows for separation of content and presentation • Enables responsive design • Offers a wide range of styling options

JavaScript

Primary Use Case	Key Features/benefits/
Adding interactivityand functionality to web pages	• Can manipulate and modify web page content in real-time • Offers a wide range of functionality through librariesand frameworks • Allowsfor server-side scripting with Node.js