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). The code to display heading "I'm happy to learn Web Development" is writer below:



2. Write a simple program in HTML, the webpage must contain the heading "Comments" and below the heading add some information about comments. The webpage must be rendered on the browser as below image.

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.

</body>
</html>

Output:



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.

Here is an example of a self-closing tag:

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

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

Here are some other examples of tags:

<a>> Tag

Tag

<h1> Tag

<div> Tag

 Tag

HTML Elements:

Elements are the building blocks of HTML. They are the smallest units of content and you 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."

HTMI 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.

```
<div class="special">I am a special heading! </div>
```

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 a value can be applied to a tag.

```
<tag attribute="value"> Generic example. </tag>
```

List out any 3 tags we learned in this 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).

H1 is considered as the highest level OR the most prior heading in a webpage whereas H6 is lowest level OR least prior heading in webpage.

Ex: <h1> Text <h1/>

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: Paragraph

c. <div>--</div> DIV Tag:

DIV Tag is used to group multiple HTML elements within 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:

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.

Question 1:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible"</pre>
    content="IE=edge" />
    <meta name="viewport" content="width=device-</pre>
   width, initial-scale=1.0" />
    <title>Question 1 using Emmet</title>
  </head>
  <body>
    <!-- Emmet : h1{I am happy to learn Web
    Development } -->
    <h1>I am happy to learn Web Development</h1>
  </body>
</html>
```

Output:



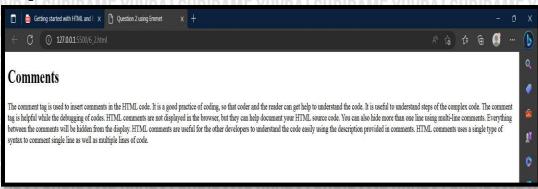
Question 2:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible"</pre>
  content="IE=edge" />
  <meta name="viewport" content="width=device-width,</pre>
  initial-scale=1.0" />
  <title>Question 2 using Emmet</title>
</head>
<body>
  <!-- Emmet : h1{Comments} -->
  <h1>Comments</h1>
  >
    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.

</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 Childes

Child operator is used to nest elements inside each other.

Ex:

div>ul>li*2

</div>

b. Sibling: +

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

Ex:

```
div+p
  The above operator crea
  <div> </div>

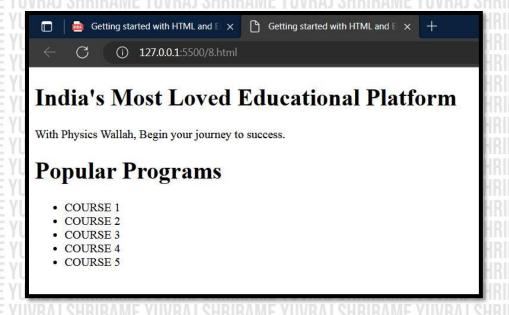
  Climb-up: ^
  Using climb up operator we can climb one level up the tree and
  change context.
  Ex:
  Div+div>p>span+em^bq
  The above operator creates-
  <div></div>
  <div>
           >
               <span></span>
               <em></em>
           <blockquote></blockquote>
  </div>
d. Grouping: ()
  It is used for grouping subtrees in complex abbreviations
  Ex:
  div>(header>ul>li*2>a)+footer>p
  The above operator creates-
  <div>
           <header>
               <l
                   <a href=""></a>
                   <a href=""></a>
               </header>
           <footer>
               </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.

Here's the code-

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <meta charset="UTF-8"</pre>
   <meta http-equiv="X-UA-Compatible"</pre>
   content="IE=edge" />
   <meta name="viewport" content="width=device-</pre>
   width, initial-scale=1.0" />
   <title>Getting started with HTML and Emmet
   Assignment</title>
 </head>
 <body>
   <!-- Emmet Abbreviation: h1{India's Most Loved
   Educational Platform} -->
   <h1>India's Most Loved Educational Platform</h1>
   <!-- Emmet Abbreviation: p{With Physics Wallah,
   Begin your journey to success.} -->
   With Physics Wallah, Begin your journey to
   success.
   <!-- Emmet Abbreviation: h1{Popular
   <h1>Popular Courses</h1>
   <l
     COURSE 1
     COURSE 2
     COURSE 3
     COURSE 4
     COURSE 5
   </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 ,
,<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

```
Ex:
<meta charset="UTF-8" />
<meta http-equiv="X-UA-Compatible" content="IE=edge"
/>
<meta name="viewport" content="width=device-width,
initial-scale=1.0" />
```

<title>Getting started with HTML and Emmet Assignment</title>

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

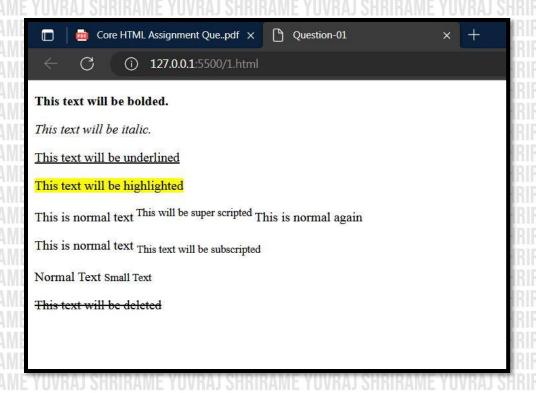
ASSIGNMENT

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 http-equiv="X-UA-Compatible"</pre>
   content="IE=edge"/>
   <meta name="viewport" content="width=device-width,</pre>
   initial-scale=1.0" />
   <title>Question-01</title>
  </head>
  <body>
    <b> This text will be bolded. </b> 
   <i> This text will be italic. </i> 
    <ins> This text will be underlined</ins> 
   <mark> This text will be highlighted </mark>
    This is normal text<sup> This will be super
   scripted </sup> This is normal again 
   This is normal text <sub> This text will be
   subscripted </sub>
   Normal Text <small> Small Text </small>
   <del> This text will be deleted</del>
  </body>
</html>
```

Output-



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

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <meta charset="UTF-8"</pre>
   <meta http-equiv="X-UA-Compatible"</pre>
   <meta name="viewport"</pre>
                        content="width=device-width.
   initial-scale=1.0" />
   <title>Question-02 (Table)</title>
  </head>
 <body>
   <thead>
       SI No.
         Name
         Course
```

```
Email
 </thead>
Aarav Sharma
  FSWD
  aarav.sharma@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
    siya.singh@gmail.com
   </body>
</html>
```

	COIE HTIVIL ASSIGN	nment Quepdf ×	Question-02 (Table)	×
← C (i) 127.0.0.1:5500/2.html				
SI No.	Name	Course	Email	
1	Aarav Sharma	FSWD	aarav.sharma@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	siya.singh@gmail.com	

Build a simple webpage that displays the table shown below.

```
<!DOCTYPE html>
<html lang="en">
 <head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
  <meta name="viewport" content="width=device-width,</pre>
  initial-scale=1.0" />
  <title>Question-03 (Table)</title>
 </head>
 <body>
  <thead>
     Product
      Flavours & Quantity
     </thead>
    Dairy
     Ice Creams
      Vanilla
      500g
     Chocolate
      250g
     Butter Scotch
      1kg
```

```
Beverages
  Soda
   Cola
   0.5 L
  Orange
   1 L
  Lime
   2 L
  </body>
</html>
```



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 // Code
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
  <meta name="viewport" content="width=device-width,</pre>
initial-scale=1.0" />
  <title>HomePage</title>
<body>
  <div>
    <a href="./home.html">Home</a>
    <a href="./webdevelopment.html">Web Development</a>
      href="./webdesign.html">Web Design</a>
  </div>
  <div>
    <h1>Yuvraj Shrirame</h1>
    >
      Hi! I'm Yuvraj. I'm currently pursuing my
      Bachelor's degree in computer science and
      Simultaneously I've started learning Full-Stack
      Web Development at PWSkills.
    </div>
</body>
</html>
```

Page-02 // Code

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
  <meta name="viewport" content="width=device-width,</pre>
  initial-scale=1.0" />
  <title>Web-Design-Page</title>
</head>
<body>
  <div>
    <a href="./home.html">Home</a>
    <a href="./webDevelopment.html">Web Development</a>
    <a href="./webDesign.html">Web Design</a>
  </div>
  <div>
    <h1>Web Design.</h1>
      Lorem ipsum dolor, sit amet consectetur
      Adipisicing elit. Hic odio libero neque
      repudiandae error incidunt sunt, 🎾
      nostrum qui ipsum necessitatibus debitis fuga
      expedita labore quaerat non officia. Iure
      dignissimos odio quia assumenda nisi tempora
      provident quisquam esse
      reiciendis, architecto ipsa nulla odit alias
      saepe? Ipsa
      nisi est
      perspiciatis similique, saepe, nemo nam illo quas
      blanditiis aut hic, dolorum veniam fuga nostrum
      enim inpraesentium dolor harum! Eum assumenda sed
      cum omnis facere neque veniam odit perferendis
      temporibus
```

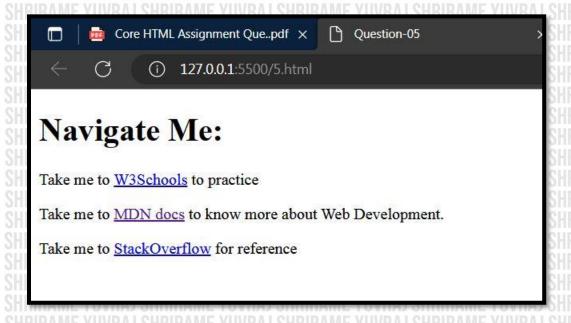
```
</div>
</body>
</html>
Page-03 // Code
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
  />
  <meta name="viewport" content="width=device-width,</pre>
  initial-scale=1.0" />
  <title>Web-Development-Page</title>
</head>
<body>
  <div>
    <a href="./home.html">Home</a>
    <a href="./webDevelopment.html">Web Development</a>
    <a href="./webDesign.html">Web Design</a>
  </div>
  <div>
    <h1>Web Development</h1>
      Lorem ipsum dolor, sit amet consectetur
      adipisicing elit. Neque tenetur est tempore
      asperiores adipisci incidunt
      maiores ducimus voluptas corporis earum
      voluptatum, quo recusandae nulla aperiam magnam
      quibusdam dolor id ullam
      facere ipsam accusamus reiciendis. Nam lle n,
      voluptates doloremque molestiae velit cupiditate
      consequatur error itaque sapiente rem minus. Sint,
      incidunt suscipit cumque et consequuntur sapiente
      officiis unde similique perspiciatis dolore
      debitis reprehenderit non numquam dignissimos
      adipisci laboriosam repellat, sed quas delectus
```

```
aut consectetur assumenda expedita? Magni omnis,
    molestias distinctio quibusdam, quo,
    vel voluptas id corrupti saepe velit quod
    architecto maxime nesciunt repudiandae beatae qui
    provident expedita obcaecati minima voluptate!

    </div>
    </body>
    </html>
```

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.

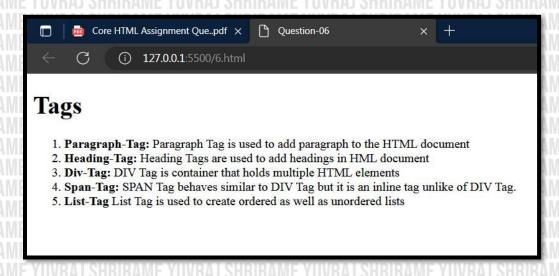
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
    <meta name="viewport" content="width=device-width,</pre>
    initial-scale=1.0" />
    <title>Question-05</title>
  </head>
  <body>
    <h1>Navigate Me:</h1>
    >
      Take me to
      <a href="https://w3schools.com/"</pre>
      target=" blank">W3Schools</a> to practice
    >
      Take me to
      <a href="https://developer.mozilla.org/en-US/"</pre>
      target=" blank">MDN docs</a>
      to know more about Web Development
```



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

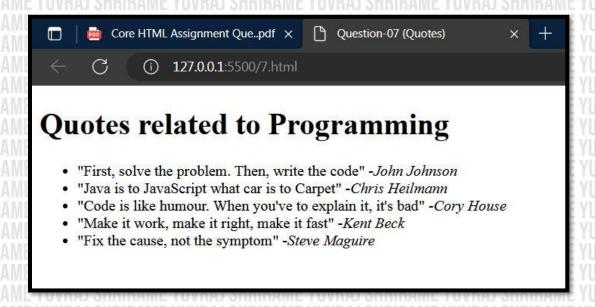
```
<!DOCTYPE html>
<html lang="en">
  <head>
        <meta charset="UTF-8" />
        <meta http-equiv="X-UA-Compatible" content="IE=edge"
        />
        <meta name="viewport" content="width=device-width,</pre>
```

```
initial-scale=1.0"
   <title>Question-06</title>
 </head>
 <body>
   <h1>Tags</h1>
   <01>
     <b>Paragraph-Tag: </b> Paragraph Tag
     to add paragraph to the HTML document
     <b>Heading-Tag: </b> Heading Tags are used to
     add headings in HML document
     <b>Div-Tag: </b> DIV Tag is container that
     holds multiple HTML elements
     <b>Span-Tag: </b> SPAN Tag behaves similar to
     DIV Tag but it is an inline tag unlike of DIV
     Tag.
     <b>List-Tag</b> List Tag is used to create
     ordered as well as unordered lists
   </body>
</html>
```



Create an unordered list of 5 programming quotes, using the tag.

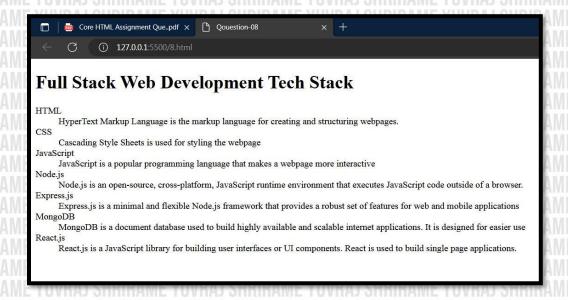
```
<!DOCTYPE html>
<html lang="en">
  <head>
   <meta charset="UTF-8"</pre>
   <meta http-equiv="X-UA-Compatible" content="IE=edge"</pre>
   <meta name="viewport" content="width=device-width,</pre>
   initial-scale=1.0" />
   <title>Question-07 (Quotes)</title>
  </head>
  <body>
   <h1>Quotes related to Programming</h1>
   <l
     "First, solve the problem. Then, write the code"
       -<i>John Johnson </i>
     "Java is to JavaScript what car is to Carpet" -
       <i>Chris Heilmann </i>
     "Code is like humour. When you've to explain it,
       it's bad" -<i>Cory House </i>
     "Make it work, make it right, make it fast"
       <i>Kent Beck </i>
     <
       "Fix the cause, not the symptom" -<i>Steve
       Maguire </i>
     </body>
</html>
```



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.

```
for creating
 and structuring webpages.
</dd>
<dt>CSS</dt>
<dd>
 Cascading Style Sheets is used for styling the
 webpage
</dd>
<dt>JavaScript</dt>
<dd>
 JavaScript is a popular programming language
 that makes a webpage more interactive
</dd>
<dt>Node.js</dt>
<dd>
 Node.js is an open-source, cross-platform,
 JavaScript runtime who elements
 environment that executes JavaScript code
 outside of a browser.
</dd>
<dt>Express.js</dt>
 Express.js is a minimal and flexible Node.js
 framework that provides a robust set of features
 for web and mobile applications
</dd>
<dt>MongoDB</dt>
 MongoDB is a document database used to build
 highly available and scalable internet
 applications. It is designed for easier use
</dd>
<dt>React.js</dt>
<dd>
 React.js is a JavaScript library for building
 user interfaces or UI
 components. React is used to build single page
 applications.
</dd>
```

```
</dl>
</body>
</html>
```

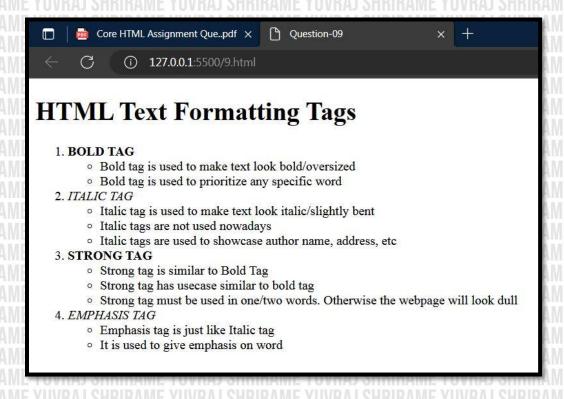


9. Create an ordered list of the most common text formatting tags in HTML within each list item, use an unordered list to list the specific use cases and best practices for that tag.

```
<b>BOLD TAG</b>
    <l
      Bold tag is used to make text look
      bold/oversized
      Bold tag is used to prioritize any
      specific word 
    <1i>>
    <i>ITALIC TAG</i>
    <l
      Italic tag is used to make text look
      italic/slightly bent 
      Italic tags are not used nowadays
      Italic tags are used to showcase author
      name, address, etc
    <strong>STRONG TAG</strong>
      Strong tag is similar to Bold Tag
      Strong tag has usecase similar to bold tag
      Strong tag must be used in one/two words.
      Otherwise the webpage will look dull
    <
    <em>EMPHASIS TAG</em>
    <l
      Emphasis tag is just like Italic tag
      It is used to give emphasis on word 
    </body>
```

</html>

Output-



10. Create an ordered list of Full Stack Web Development tech stack HTML, CSS, JS. For each tech stack, create a table that lists the tech stack name, its primary use cases, and some key features or benefits. Below is the reference image.

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8" />
        <meta http-equiv="X-UA-Compatible" content="IE=edge"
        />
        <meta name="viewport" content="width=device-width,
        initial-scale=1.0" />
        <title>Question-10</title>
```

```
</head>
<body>
 Use Cases
      Key Features
    Creates Basic Skeleton of Webpage
      <l
        Simple to use
        Contains text within text (i.e.
        hypertext)
        Creates the basic skeleton of
        webpage
       <
   Use Cases
      Key Features
    Styling Web Pages using CSS
      <l
        It makes webpage beautiful
        CSS handles styling part
        It comes with external plugins
        (tailwind)
```

```
Use Cases
      Key Features
     Increases Interactivity
      <l
        JavaScript is popular programming
        language
        Adds more functionality
        It comes with more modifies
        frameworks
    </body>
</html>
```

