Core HTML - Answers

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

CODE :

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name="variable" content="width=device-width
initial-scale=1.0">
    </head>
    <body>
        <br>
        <b>Junior Software Developer</b>
        <br>
        <br>
        <i>Junior Software Developer</i>
        <br>
        <br>
        <ins>Junior Software Developer</ins>
        <br>
        <br>
        <mark>Junior Software Developer</mark>
        <p>Junior <sup>Software</sup> Developer</p>
        <p>Junior <sub>Software</sub> Developer</p>
        <p>Junior <small>Software</small> Developer</p>
        <del>Junior Software Developer</del>
    </body>
</html>
```

EXPLANATION :

- ➔ <body>: This section contains the visible content of the webpage.
- ➔
: This tag inserts a single line break. It's used here to create vertical spacing between the different lines of text.
- ➔ <b>: The <b> tag makes the enclosed text bold.
- ➔ <i>: The <i> tag makes the enclosed text italic.

- ➔ <ins>: The <ins> tag represents inserted text. Browsers typically display this text with an underline.
- ➔ <mark>: The <mark> tag represents text highlighted for reference purposes. Browsers typically display this text with a yellow background.
- ➔ <p>: The <p> tag defines a paragraph.
- ➔ : This is an HTML entity that represents a non-breaking space. It's used here to create spacing around the superscript and subscript text.
- ➔ <sup>: The <sup> tag defines superscripted text, which appears slightly above the normal line.
- ➔ <sub>: The <sub> tag defines subscripted text, which appears slightly below the normal line.
- ➔ <small>: The <small> tag defines smaller text.
- ➔ <del>: The <del> tag represents deleted text. Browsers typically display this text with a strikethrough.

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2. Build a simple webpage that helps users navigate different web development-related websites.

CODE :

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name="variable" content="width=device-width
initial-scale=1.0">
        <title>Navigate Me</title>
    </head>
    <body>
        <p>
            Take me
            <a href="https://www.pwskills.com/" target="_blank">PW
Skills</a>
            to buy a course.
        </p>
        <p>
```

```
            Take me to
            <a href="https://developer.mozilla.org/en-US/"
target="_blank">MDN docs</a>
            know more about Web Development.
        </p>
        <p>
            Take me to
            <a href="https://pwskills.com/courses/" target="_blank">PW
Skills Courses</a>
            to practice live coding.
        </p>
    </body>
</html>
```

EXPLANATION :

- ➔ <title>Navigate Me</title>: This tag defines the title that appears in the browser tab or window title bar.
- ➔ <a>: This tag defines a hyperlink.
- ➔ href="URL": The href attribute specifies the destination URL of the link.
- ➔ target="_blank": The target="_blank" attribute tells the browser to open the linked document in a new tab.
- ➔ text: The text between the opening <a> and closing tags is the visible link text.

OUTPUT : Preview

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3. 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 the home page you can add some information about yourself.

CODE :

HOME PAGE

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name="variable" content="width=device-width,
initial-scale=1.0">
        <title>Simple Blog</title>
    </head>
    <body>
        <nav>
            <a href="index.html">Home</a> <span>  <a
href="web-development.html">Web Development</a></span> <span>  <a
href="web-design.html">Web Design</a></span>
        </nav>
        <h1>Personal Blog</h1>
        <p>Hello! My name is Vishnu Vardhan, and I'm passionate about
learning and sharing my journey in the world of web technologies. This
simple blog is a place where I'll be posting about topics that interest
me, including web development and web design. Feel free to explore the
different sections of the blog to learn more about these exciting
fields.</p>
    </body>
</html>
```

WEB DEVELOPMENT

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

```
            <a href="index.html">Home</a> <span>  <a
href="web-development.html">Web Development</a></span> <span>  <a
href="web-design.html">Web Design</a></span>
        </nav>
        <h1>Personal Blog</h1>
        <p>Hello! My name is Vishnu Vardhan, and I'm passionate about
learning and sharing my journey in the world of web technologies. This
simple blog is a place where I'll be posting about topics that interest
me, including web development and web design. Feel free to explore the
different sections of the blog to learn more about these exciting
fields.</p>
    </body>
</html>
```

WEB DESIGN

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
        <meta name="viewport"
content="width=device-width,initial-scale=1.0">
        <title>Web Design</title>
    </head>
    <body>
        <nav>
            <a href="index.html">Home</a> <span>  <a
href="web-development.html">Web Development</a></span> <span>  <a
href="web-design.html">Web Design</a>
        </nav>
        <h1>Web Design</h1>
        <p>Web design encompasses the visual aesthetics and usability
of a website. It involves planning and creating the website's layout,
structure, user interface, navigation, colors, fonts, and imagery.</p>
    </body>
</html>
```

OUTPUT : Preview

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

CODE :

```
<ol>
    <li>
      <code>&lt;!DOCTYPE html&gt;</code> - This declaration defines the document type to be HTML5. It's the very first thing in your HTML document.
    </li>
    <li>
      <code>&lt;html&gt;</code> - The root element of every HTML page. It tells the browser that this is an HTML document.
    </li>
    <li>
      <code>&lt;head&gt;</code> - Contains meta-information about the HTML document, such as the character set, title, scripts, and stylesheets. This information is not displayed on the page itself.
    </li>
    <li>
      <code>&lt;title&gt;</code> - Defines the title of the HTML document, which is shown in the browser's title bar.
    </li>
    <li>
      <code>&lt;meta&gt;</code> - Provides metadata about the HTML document, such as character set, description, keywords, author, and viewport settings.
    </li>
    <li>
      <code>&lt;link&gt;</code> - Used to link external resources to the HTML document, most commonly used to link to CSS stylesheets.
    </li>
    <li>
      <code>&lt;style&gt;</code> - Contains inline CSS styles for the HTML document.
    </li>
    <li>
      <code>&lt;body&gt;</code> - Contains the visible page content.
    </li>
    <li>
```

```
      <code>&lt;h1&gt;</code> to <code>&lt;h6&gt;</code> - Define HTML
headings. <code>&lt;h1&gt;</code> is the most important heading, and
<code>&lt;h6&gt;</code> is the least important.
    </li>
    <li>
      <code>&lt;p&gt;</code> - Defines a paragraph. Browsers
automatically add some space before and after each
<code>&lt;p&gt;</code> element.
    </li>
    <li>
      <code>&lt;br&gt;</code> - Represents a line break. It's an empty
tag, meaning it has no closing tag.
    </li>
    <li>
      <code>&lt;hr&gt;</code> - Represents a thematic break between
content, often displayed as a horizontal rule. It's also an empty tag.
    </li>
    <li>
      <code>&lt;a&gt;</code> - Defines a hyperlink.
    </li>
    <li>
      <code>&lt;img&gt;</code> - Embeds an image in the HTML document.
It's an empty tag.
    </li>
    <li>
      <code>&lt;ul&gt;</code> - Defines an unordered list.
    </li>
    <li>
      <code>&lt;ol&gt;</code> - Defines an ordered list.
    </li>
    <li>
      <code>&lt;li&gt;</code> - Defines a list item.
    </li>
    <li>
      <code>&lt;dl&gt;</code> - Defines a description list.
    </li>
    <li>
        <code>&lt;table&gt;</code> - Defines a table.
    </li>
    <li>
        <code>&lt;iframe&gt;</code> - Used Embed another HTML Document
within the current document.
    </li>
```

```
</ol>
```

OUTPUT : Preview

---

5. Create a description list of full stack web development tech stack, using the 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:

```
<dl>
    <dt><mark>HTML :</mark></dt>
     <dd>The standard markup language for creating web pages and web applications. It provides the structure and content of a website.</dd>

    <dt><mark>CSS :</mark></dt>
    <dd>A style sheet language used for describing the presentation of a document written in a markup language like HTML. It controls the layout, colors, fonts, and other visual aspects of a website.</dd>

    <dt><mark>Javascript :</mark></dt>
     <dd>A high-level, interpreted programming language primarily used to add interactivity and dynamic behavior to web pages. It runs on the client-side and can also be used on the server-side.</dd>
    <dt><mark>Databases :<mark></mark></dt>
       <dd>Systems used for storing, managing, and retrieving data. Relational databases like MySQL and PostgreSQL use structured tables, while NoSQL databases like MongoDB are document-oriented and offer more flexibility.</dd>

    <dt><mark>Server-Side Programming Languages :</mark></dt>
        <dd>Languages used to develop the back-end logic of web applications, handling data processing, business logic, and communication with the database. Frameworks like Django (Python), Spring (Java), Ruby on Rails (Ruby), Laravel (PHP), and ASP.NET (C#) are commonly used.</dd>

    <dt><mark>APIs (Application Programming Interfaces) :</mark></dt>
```

```
      <dd>Sets of rules and protocols that allow different software applications to communicate with each other. In web development, RESTful APIs are commonly used for communication between the front-end and back-end.</dd>

    <dt><mark>Version Control (Git) :</mark></dt>
     <dd>Systems used to track changes to code over time, allowing for collaboration, branching, and reverting to previous versions. Git is the most widely used distributed version control system.</dd>
  </dl>
```

OUTPUT : Preview

---

6. Create an ordered list of the full stack web development tech stack HTML, CSS, and JS. For each tech stack, create a table that lists the tech stack name, its primary use cases, and some key features or benefits.

CODE :

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
                    <meta   name="variable"   content="width=device-width, initial-scale=1.0">
        <title>Tech Stack</title>
    </head>
    <body>
        <ol>
            <li><b>HTML</b></li>
            <br>
        <table Border="1" cellspacing="4" cellpadding="10">
            <th>Primary usecase</th>
            <th>Key Features/Benefits</th>
            <tr>
                <th>Building the structure of web pages</th>
                <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>
    <li><b>CSS</b></li>
    <br>
    <table Border="1" cellspacing="4" cellpadding="10">
        <th>Primary usecase</th>
        <th>Key Features/Benefits</th>
        <tr>
            <th>Styling and layout of webpages</th>
            <td>
                <ul>
                            <li>Allows Separation of content and
presentation.</li>
                    <li>Enables responsive design.</li>
                             <li>offers a wide range of styling
options.</li>
                </ul>
            </td>
        </tr>
    </table>
    <br>
    <li><b>JavaScript</b></li>
    <br>
    <table Border="1" cellspacing="4" cellpadding="10">
        <th>Primary usecase</th>
        <th>Key Features/Benefits</th>
        <tr>
               <th>Adding interactivity and dynamic behavior to web
pages</th>
            <td>
                <ul>
                    <li>Enables dynamic and responsive UIs.</li>
                      <li>Allows using JavaScript for both front-end
and back-end.</li>
                       <li> Runs on most browsers and can build apps
for various OS.</li>
                </ul>
```

```
                </td>
            </tr>
        </table>
    </ol>
</body>
</html>
```

OUTPUT : Preview

---

7. Build a complex nested list structure representing a multi-level table of contents. Use unordered lists (<ul>) and list items (<li>) with inline-block styling to create a structured layout. Apply formatting tags to enhance the presentation of list items.

CODE :

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
                    <meta   name="variable"   content="width=device-width,
initial-scale=1.0">
        <title>Nested list</title>
    </head>
    <body>
        <h1>Table of Contents</h1>
        <ul>
            <li><ins>Part 1: Introduction</ins></li>
            <li><ins>Part 2: Getting Started</ins></li>
            <ul>
                <li><ins>2.1 Installing the Software</ins></li>
                <li><ins>2.2 Creating a New Project</ins></li>
                <ul>
                    <li><ins>2.2.1 Project Templates</ins></li>
                    <li><ins>2.2.2 Customizing Settings</ins></li>
                </ul>
            </ul>
            <ul>
                <li><ins>2.3 Exploring the Interface</ins></li>
```

```
                <ul>
                    <li><ins>2.3.1 Toolbar Features</ins></li>
                    <li><ins>2.3.2 Panel Layout</ins></li>
                    <ul>
                        <li><ins>2.3.2.1 Docking Panel</ins></li>
                        <li><ins>2.3.2.2 Tabbed Interface</ins></li>
                    </ul>
                </ul>
            </ul>
        </ul>
        <ul>
            <li><ins>Part 3: Advanced Topics</ins></li>
            <ul>
                <li><ins>3.1 Working with Plugins</ins></li>
                <ul>
                    <li><ins>3.1.1 Installing Plugins</ins></li>
                    <li><ins>3.1.2 Plugin Configuration</ins></li>
                </ul>
            </ul>
            <ul>
                <li><ins>3.2 Customizing UI</ins></li>
                <ul>
                    <li><ins>3.2.1 Changing Themes</ins></li>
                    <li><ins>3.2.2 Configuring Shortcuts</ins></li>
                </ul>
            </ul>
            <ul>
                <li><ins>3.3 Optimizing Performance</ins></li>
                <ul>
                    <li><ins>3.3.1 Caching Strategies</ins></li>
                    <li><ins>3.3.2 Resource Minification</ins></li>
                </ul>
            </ul>
        </ul>
        <ul>
            <li><ins>Part 4: Conclusion</ins></li>
        </ul>
    </body>
</html>
```

OUTPUT : Preview

8. Create a table to display a conference schedule. Each row corresponds to a time slot, and each column corresponds to a room. Some time slots might have multiple sessions running simultaneously in different rooms. Utilize rowspan and colspan attributes as necessary to accommodate this complex schedule. (use table attribute “cellpadding” to give extra padding in each table cell).

CODE :

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="UTF-8">
                    <meta   name="variable"   content="width=device-width,
inital-scale=1.0">
        <title>Conference Schedule</title>
    </head>
    <body>
        <h1>Conference Schedule</h1>
        <table Border="1" cellspacing="5" cellpadding="10">
            <tr>
            <th>Time</th>
            <th>Room 1</th>
            <th>Room 2</th>
            <th>Room 3</th>
            <th>Room 4</th>
            </tr>
            <tr>
                <th rowspan="2">9:00 A.M - 10:00 A.M</th>
                <td>Keynote</td>
                <td>Session A</td>
                <td>Session B</td>
                <td rowspan="2">Session C</td>
                <tr>
                <td>10:30 A.M - 11:30 A.M</td>
                <td>Session D</td>
                <td>Session E</td>
                </tr>
            </tr>
            <tr>
                <th>12:00 P.M - 1:00 P.M</th>
                <td colspan="4">Lunch Break</td>
            </tr>
```

```
            <tr>
                <th rowspan="2">1:00 P.M - 2:00 P.M</th>
                <td>Session G</td>
                <td rowspan="2">Session H</td>
                <td>Session I</td>
                <td>Session J</td>
                <tr>
                    <td>Session K</td>
                    <td>Session L</td>
                    <td>Session M</td>
                </tr>
            </tr>
        </table>
    </body>
</html>
```

OUTPUT : Preview
