



BCSE203E- Web Programming

Activity -4

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Trace the output for the following elements and infer the similarities and differences

1. Div and span

Screenshot code	Screenshot output
<pre><!DOCTYPE html> <html> <head> <title>Div and Span Example</title> <style> .div-box { border: 2px solid black; padding: 10px; margin: 10px; } .span-highlight { color:blue; font-weight: bold; } </style> </head> <body> <div class="div-box"> This is a div container. This is a span element inside a div. </div> <div class="div-box"> Another div container. This span has no styling applied. </div> </body> </html></pre>	

Div – Block-level element used for structuring and sectioning content.
 Span – Inline element used for styling or grouping small portions of text
 Inference - Divs organize layouts; spans apply styles within existing text flow.

2. Div and section

Screenshot code	Screenshot output
<pre> <!DOCTYPE html> <html> <head> <title>Div vs Section</title> </head> <body> <div> <h2>Div Example</h2> <p>This is a generic block container for grouping content.</p> </div> <section> <h2>Section Example</h2> <p>This defines a thematic grouping of content, such as a chapter or topic.</p> </section> </body> </html> </pre>	<p>Div Example</p> <p>This is a generic block container for grouping content.</p> <p>Section Example</p> <p>This defines a thematic grouping of content, such as a chapter or topic.</p>
<p>Div – Generic block-level element for grouping content without semantic meaning. Section– Block-level element specifically used to define thematic or logical sections of content. Inference - Use div for styling or generic grouping; use section for semantically meaningful divisions of a document.</p>	

3. Paragraph and article

Screenshot code	Screenshot output
<pre> <!DOCTYPE html> <html> <head> <title>Paragraph vs Article</title> </head> <body> </pre>	

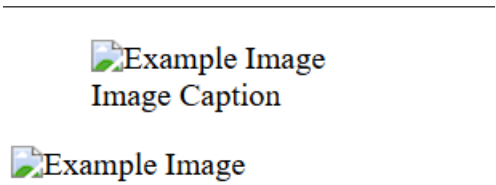
<pre> <p>This is a single paragraph, part of the document's main content.</p> <article> <h2>Article Example</h2> <p>This is the first paragraph of an article.</p> <p>This is the second paragraph, expanding on the topic.</p> </article> </body> </html> </pre>	<p>This is a single paragraph, part of the document's main content.</p> <h2>Article Example</h2> <p>This is the first paragraph of an article.</p> <p>This is the second paragraph, expanding on the topic.</p>
<p>Paragraph– Used for grouping a block of text into smaller, readable units. Article– Represents a self-contained, standalone piece of content like an article, blog post, or news story. Inference - Use p for individual paragraphs. Use article for self-contained, reusable content blocks.</p>	

4. Navigation and anchor

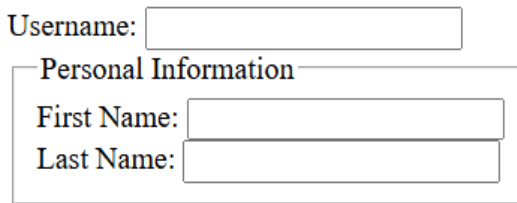
Screenshot code	Screenshot output
<pre> <!DOCTYPE html> <html> <head> <title>Navigation vs Anchor</title> </head> <body> <nav> Home About Contact </nav> <p>Learn more on our FAQ page.</p> </body> </html> </pre>	<p>Home About Contact</p> <p>Learn more on our FAQ page.</p>

<p>Navigation– Groups multiple navigation links and adds semantic meaning for menus or navigation bars.</p> <p>Anchor – Represents individual hyperlinks to navigate between pages, sections, or resources.</p> <p>Inference - Use <nav> for organizing navigation links; use <a> for creating individual links.</p>
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5. Figure and image

Screenshot code	Screenshot output
<pre><!DOCTYPE html> <html> <head> <title>Figure vs Image</title> </head> <body> <figure> <figcaption>Image Caption</figcaption> </figure> </body> </html></pre>	
<p>Figure– A container for media content (images, videos, charts, etc.) along with its caption.</p> <p>Image– Represents an image or graphic within a webpage.</p> <p>Inference - Use <figure> to group media with a caption (<figcaption>). Use to embed a standalone image without additional semantic structure.</p>	

6. Label and legends

Screenshot code	Screenshot output
<pre><!DOCTYPE html> <html> <head> <title>Label vs Legend</title> </head> <body> <form> <label for="username">Username:</label> <input type="text" id="username" name="username"> </form></pre>	

<pre> <form> <fieldset> <legend>Personal Information</legend> <label for="fname">First Name:</label> <input type="text" id="fname" name="fname">
 <label for="lname">Last Name:</label> <input type="text" id="lname" name="lname"> </fieldset> </form> </body> </html> </pre>	
<p>Label – Used to associate text with a specific form input (e.g., text fields, checkboxes).</p> <p>Legends– Provides a caption or title for a group of related form elements, grouped using a <fieldset>.</p> <p>Inference - Use <label> to describe individual inputs. Use <legend> to caption grouped inputs within a <fieldset>.</p>	

7. Strong vs bold vs emphasis tag

Screenshot code	Screenshot output
<pre> <!DOCTYPE html> <html> <head> <title>Strong vs Bold vs Emphasis</title> </head> <body> <p>This text is bold for styling.</p> <p>This text has strong importance in meaning.</p> <p>This text is emphasized for stress in context.</p> </body> </html> </pre>	<p>This text is bold for styling.</p> <p>This text has strong importance in meaning</p> <p>This text is <i>emphasized</i> for stress in context.</p>

Strong- Emphasizes text with semantic meaning, indicating importance or seriousness.

Emphasis- Adds semantic emphasis to text, indicating stress or importance in context.

Bold- Makes text visually bold without implying importance or context

Inference - Use for styling, for semantic importance, and for contextual stress or emphasis.