



BCSE203E- Web Programming

Assignment 1B

Activity 4

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

Div and Span

Screenshot code	Screenshot output
<pre>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 <h1>This is a span title.</h1> 10 <h1><div style="background-color: tomato;">this is a div title.</div></h1> 11 </body> 12 </html></pre>	<p>This is a span title.</p> <p>this is a div title.</p>

The **div**(division) element in HTML is a generic container used to group and structure content. It does not have any inherent styling or functionality but is commonly used with CSS and JavaScript to style, position, or manipulate sections of a webpage.

The **span** element in HTML is an inline container used to apply styling or manipulate small portions of text without affecting the overall layout. Unlike **div**, which is a block-level element, **span** does not break the flow of text.

Div and Title

Screenshot code	Screenshot output
<pre>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 <h1><div style="background-color: #f08080;">this is a div title.</div></h1> 10 <section style="background-color: #ffff00;"> 11 <h2>This is a section title </h2> 12 <p> this paragraph is a part of the section as well.</p> 13 </section> 14 </body> 15 </html></pre>	<div>this is a div title.</div> <div>This is a section title</div> <div>this paragraph is a part of the section as well.</div>
<p>The <div> element is a generic container used for layout and styling, with no inherent meaning. It is mainly used for grouping elements and applying CSS or JavaScript. In contrast, <section> is a semantic element that organizes content into meaningful sections, helping search engines and accessibility tools understand the page structure. Use <div> for purely structural purposes and <section> when content is thematically related.</p>	

Article and Paragraph

Screenshot code	Screenshot output
<pre>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>Article</title> 7 <style> 8 SelectorSpecificity(0,0,1) {, sans-serif; } 9 article { border: 1px solid #888; padding: 10px; margin-bottom: 10px; background: #f0f0f0; } 10 p { color: #555; } 11 </style> 12 </head> 13 <body> 14 15 <p>This is a paragraph. It is a single block of text.</p> 16 17 <article> 18 <h3>Article Title</h3> 19 <p>This is an article. It groups related content.</p> 20 </article> 21 22 </body> 23 </html></pre>	<p>This is a paragraph. It is a single block of text.</p> <div><h3>Article Title</h3><p>This is an article. It groups related content.</p></div>
<p>The <article> element is a semantic container used for self-contained, independent content like blog posts, news articles, or user comments. It represents content that can stand alone or be distributed separately. In contrast, the <p> (paragraph) element is used to define blocks of text, usually forming part of an article or section. Use <article> for standalone content and <p> for structuring text within sections or articles.</p>	

Navigation and Anchor

Screenshot code	Screenshot output
<pre>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>Navigation vs Anchor</title> 7 </head> 8 <body> 9 10 <nav> 11 <h3>Website Navigation</h3> 12 Home 13 About 14 Contact 15 </nav> 16 17 <hr> 18 19 <p>For more information, visit this webs 20 21 </body> 22 </html> 23</pre>	<h3>Website Navigation</h3> <p>Home About Contact</p> <hr/> <p>For more information, visit this website.</p>

The **<nav>** element is a **semantic container** used to group multiple navigation links, typically for menus or website navigation. It helps improve accessibility and SEO by indicating that the links inside are for navigation.

The **<a>** (anchor) element, on the other hand, is an **individual hyperlink** used to navigate to another page, section, or external resource. While **<a>** can exist inside **<nav>**, it can also be used independently for linking anywhere in a document.

Labels and Legends

Screenshot code	Screenshot output
<pre>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>Label vs Legend</title> 7 </head> 8 <body> 9 10 <form> 11 <!-- Label for individual input --> 12 <label for="name">Name:</label> 13 <input type="text" id="name" name="name">



 14 15 <!-- Fieldset with Legend for grouping --> 16 <fieldset> 17 <legend>Contact Info</legend> 18 <label for="email">Email:</label> 19 <input type="email" id="email" name="email">

 20 21 <label for="phone">Phone:</label> 22 <input type="tel" id="phone" name="phone"> 23 </fieldset> 24 25
 26 <button type="submit">Submit</button> 27 </form> 28 29 </body> 30 </html></pre>	<p>Name: <input type="text"/></p> <p>Contact Info</p> <p>Email: <input type="email"/></p> <p>Phone: <input type="tel"/></p> <p><input type="submit" value="Submit"/></p>

The **<label>** element is used to associate a text description with a specific form input, improving accessibility and usability. Clicking a **<label>** focuses the linked input.

The **<legend>** element is used inside a **<fieldset>** to provide a title for a group of related form fields, helping users understand the grouped content.

Figure and Image

Screenshot code	Screenshot output
<pre>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>Figure vs Image</title> 7 </head> 8 <body> 9 10 <p>Regular image:</p> 11 12
 13 <p>Image inside a figure with a caption:</p> 14 <figure> 15 16 <figcaption>A beautiful scenery at sunset.</figcaption> 17 </figure> 18 19 </body> 20 </html></pre>	<p>Regular image:</p>  <hr/> <p>Image inside a figure with a caption:</p>  <p>A beautiful scenery at sunset.</p>
<p>The tag is used to display an image, while the <figure> tag is a semantic container that groups an image with an optional <figcaption>. Use <figure> when an image needs a caption or better structure.</p>	

Strong and Emphasis

Screenshot code	Screenshot output
<pre>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>Strong vs Emphasis</title> 7 </head> 8 <body> 9 10 <p>This is a very important message.</p> 11 <p>Please read carefully before proceeding.</p> 12 13 </body> 14 </html> 15</pre>	<p>This is a very important message.</p> <p>Please <i>read carefully</i> before proceeding.</p>
<p>The tag is used to indicate strong importance or urgency, typically displayed in bold. The tag is used to emphasize text, usually shown in <i>italics</i>. While both affect styling, conveys critical meaning, whereas adds subtle emphasis.</p>	