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BCSE203E – Web Programming

Assignment 1B

Activity 4: Trace the output for the following elements and infer the similarities and differences

1. Div and span


```
1    <!DOCTYPE html>
2    <html>
3    <body>
4
5    <div style="background-color: ■lightblue;">This is a div.</div>
6    <div style="background-color: ■lightgreen;">This is another div.</div>
7
8    <p>This is a <span style="color: ■red;">span</span> element.</p>
9
10   </body>
11   </html>
```


This is a div.
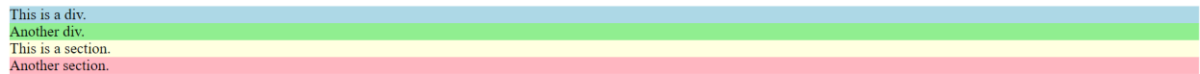This is another div.

This is a span element.

Div – Block-level element, occupies full width, starts on a new line.

Span – Inline element, does not break the flow, stays within the same line.

Inference – `div` is used for large sections, while `span` is used for styling or manipulating smaller parts of content.

2. <u>Div and Section</u>

```html
<!DOCTYPE html>
<html>
<body>

<div style="background-color: lightblue;">This is a div.</div>
<div style="background-color: lightgreen;">Another div.</div>

<section style="background-color: lightyellow;">This is a section.</section>
<section style="background-color: lightpink;">Another section.</section>

</body>
</html>
```

This is a div.
Another div.
This is a section.
Another section.

Div – Block-level element, generic container for grouping elements.
Section – Block-level element, semantically used to group related content.

Inference – `div` is for non-semantic grouping, while `section` is for semantically grouping content with a shared theme or purpose.

3. <u>Paragraph and Article</u>

```html
<!DOCTYPE html>
<html>
<body>

<p style="background-color: lightblue;">This is a paragraph.</p>
<p style="background-color: lightgreen;">Another paragraph.</p>

<article style="background-color: lightyellow;">This is an article.</article>
<article style="background-color: lightpink;">Another article.</article>

</body>
</html>
```

This is a paragraph.
Another paragraph.
This is an article.
Another article.

Paragraph – Block-level element used for text content.

Article – Block-level element used for independent, self-contained content.

Inference – `p` is for general text, while `article` is for self-contained, potentially reusable content.

4. <u>Navigation and Anchor</u>

```html
<!DOCTYPE html>
<html>
<body>

<nav style="background-color: lightblue;">This is a navigation.</nav>
<nav style="background-color: lightgreen;">Another navigation.</nav>

<a href="https://www.example.com" style="color: red;">This is an anchor link.</a>
<a href="https://www.example.com" style="color: blue;">Another anchor link.</a>

</body>
</html>
```

This is a navigation.
Another navigation.
This is an anchor link. Another anchor link.

Navigation – Block-level element used for navigation links.

Anchor – Inline element used to define hyperlinks.

Inference – `nav` is for grouping navigation links, while `a` is used for defining individual links.

5. Figure and Image

Figure – Block-level element used to group an image with its caption.

Image – Inline element used to embed an image.

Inference – `figure` is used to group images with captions or other media, while `img` is used to display an image without additional context.

6. Label and Legends

```html
<!DOCTYPE html>
<html>
<body>

<form>
  <fieldset style="background-color: lightblue;">
    <legend>Personal Information</legend>
    <label for="name">Name:</label>
    <input type="text" id="name" name="name">
  </fieldset>
</form>

<fieldset style="background-color: lightgreen;">
  <legend>Contact Information</legend>
  <label for="email">Email:</label>
  <input type="email" id="email" name="email">
</fieldset>

</body>
</html>
```

Personal Information
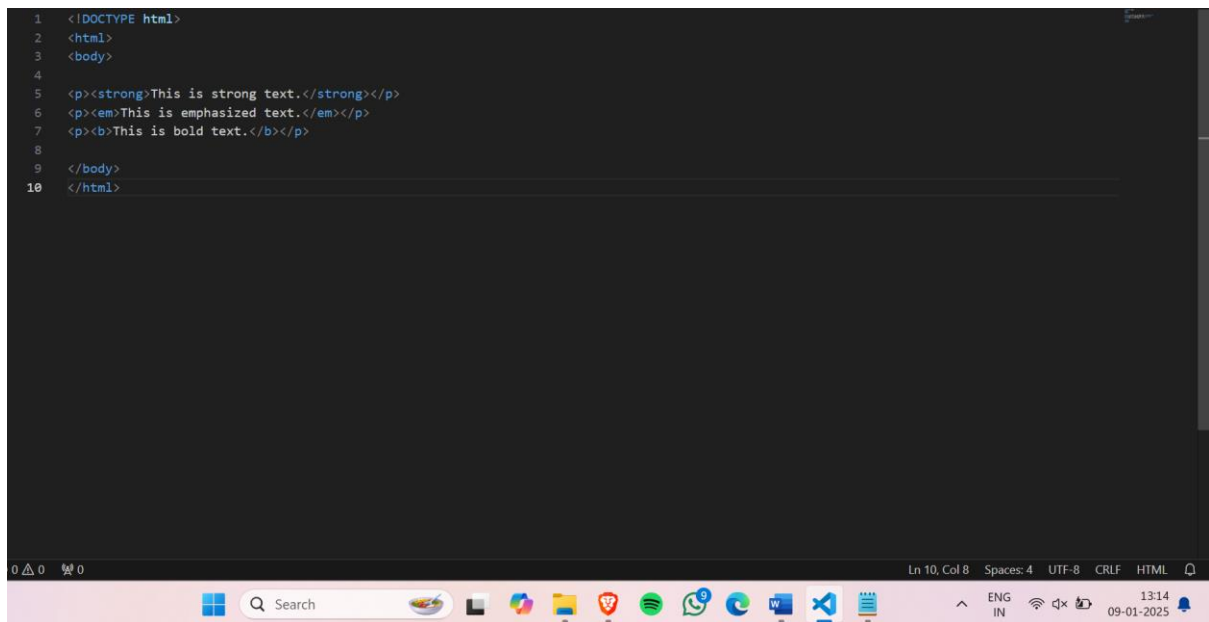Name:

Contact Information
Email:

Label – Inline element used to define a label for an input element.

Legend – Block-level element used to define a caption for a `fieldset`.

Inference – `label` is used to describe inputs, while `legend` is used to provide a caption for grouped form elements.

7. <u>Strong vs Bold vs Emphasis tag</u>

```html
1   <!DOCTYPE html>
2   <html>
3   <body>
4
5   <p><strong>This is strong text.</strong></p>
6   <p><em>This is emphasized text.</em></p>
7   <p><b>This is bold text.</b></p>
8
9   </body>
10  </html>
```

This is strong text.

This is emphasized text.

This is bold text.

Strong – Inline element used to indicate strong importance, typically rendered as bold.

Emphasis – Inline element used to indicate stressed or emphasized text, typically rendered as italics.

Bold – Inline element used for making text bold without implying strong emphasis.

Inference – `strong` conveys importance, `em` conveys emphasis, and `b` is for stylistic bold text without meaning.

Activity 5: • Create a GitHub repository and upload all your web pages. • Prepare a video report about Hosting Website on GitHub (Max 3 Mins)

Used in Activity 8 under Assignment 1C.