

Assignment No : 2

unit = 2

1. Explain the difference between heading's (`h1` - `h6`) and paragraphs (`<p>` tag) in HTML provide example of when each should be used and describe their semantic significance.

→ In HTML headings (`h1` to `h6`) and paragraphs (`p`) are essential tags for organizing and structuring content. They each have distinct roles and semantic significance, impacting readability, accessibility and search engine optimization.

• Heading (`h1` to `h6`)

Description:- Headings represent different levels of section titles or headings in a document from `h1` to `h6`.

Hierarchy:- `h1` should generally appear only once per page as the primary title while `h2` to `h6` are used for such in a hierarchical structure.

• Example :-

```
<!DOCTYPE html>
<html>
<head>
<title> Headings Example </title>
</head>
<body>
```



SILVER OAK UNIVERSITY

EDUCATION TO INNOVATION

Date : Page No.

<h1> About our company </h1>

<p> we are A Leading provider of Tech solutions </p>

<h2> our Mission </h2>

</body>

</html>

- Paragraphs (<p> tag) :-
 - The <p> tag represents a block of text as a paragraph.
 - By default paragraphs have a small margin or padding around them.

Example with code :

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

<head>

<title> Paragraph Example </title>

</head>

</body>

</html>

2. How can you create a horizontal rule (<hr> tag) in HTML? Describe its purpose and provide an example of its usage.



In HTML the <hr> tag is used to create horizontal lines which is a straight line that visually separates contents. This tag's has a few key characteristics and purpose purpose of <hr>.

visual separate: The `<hr>` tag is used to divide content.

In this example:-

The `<hr>` is customized with a height of 2px, a dark color a dark and a width of 80% centered within the page.

Adding margin is added for spacing above and below the line.

Make `<hr>` a versatile and helpful tool for structuring HTML content.

3. discuss the use of subscript (`<sub>`) and superscript (`<sup>`) tag in HTML provide example demonstrating their application in short following.

In HTML, the `<sub>` and `<sup>` tag are used to format text that appears below or above the normal line of text. These tag commonly used in scientific mathematical and typographical contexts.

1) `<sub>` Tag

Description:- The `<sub>` tag is used to display text as a subscript meaning it appears below the baseline of the surrounding text and in smaller font size.

Example of `<sub>`

```
<!DOCTYPE html>
```

~~What is this?~~



<html>

<head>

<title> subscript example </title>

</head>

<body>

<p> water is represented by the chemical
formula H H_{2} </p>

</body>

</html>

2) <sup> tag

Description: The <sup> tag displays text as a superscript meaning if appears above the baseline of the surrounding text typing in a smaller font size.

Example :

<!DOCTYPE html>

<html>

<head>

<title> superscript example </title>

</head>

<p> The Area of A square is calculated as

$\text{Area} = \text{side}^2$

</body>

</html>

4. Describe the process of aligning text in HTML using CSS what are some CSS properties and value you can use to achieve text alignment?

- Aligning text in HTML using CSS is essential for creating visually balanced and organized webpage's. CSS offers several properties for text alignment and positioning that allow you to adjust how text appears within its container.

i) Text Alignment with text-align:

- The Text-align property is used to align text horizontally within a block level element like `<div>`, `<p>`, or `<h1>`. Its values include:-

left:- Aligns the text to the left.

right:- Aligns the text within the elements.

center:- center the text within the elements.

ii) Vertical Alignment with vertical-align:

- The vertical-align property is mainly the text vertically inline or table cell elements. It aligns the text vertically in relation to other elements. same values include:

top: centers the text vertically

bottom: Aligns the text to the bottom of the elements

baseline: Aligns the text to the baseline of the parent element

- example:

```
<!DOCTYPE html>
<html>
  <head>
    <title> Horizontal Rule </title>
  </head>
  <body>
    <h1> welcome to our site </h1>
    <p> we offer a range of services to our needs </p>
  </body>
</html>
```

- 5) compare and contrast unordered lists (ul) ordered lists (ol) and definition lists (dl) in HTML.

→ In HTML Lists are a fundamental way to organize information. There are three main types of list in HTML each serving different purposes and offering unique styling options:

i) unordered lists (ul)

(a) Purpose: Used for item that do not have a sequence or priority, ideal for lists where the order of items is not important like grocery list or features list.

b) Structure:- created with the ul tag which contains li tags for each entry.

iii) ordered List

- A) Purpose: Used for list where the order of item with A numerical or alphabetical marker.
- b) Structure: Created with the `` tags also containing List items `` tags.
- c) Default style: - Display each item with a numerical or Alphabetical marker.

iii) Definition Lists `<dl>`

- A) Purpose - used for listing pairs of terms and their definitions commonly seen in glossaries or question and answer formulates.
- b) Structure :- created with the `<dl>` tag and consists of terms `<dt>` and definitions `<dd>`.
- c) Default style: - Display terms and definitions without markers or bullets typically terms appear aligned with their definition indented below.

styling options :- CSS can be used to control the indentation, spacing and visual alignment between terms and definitions.