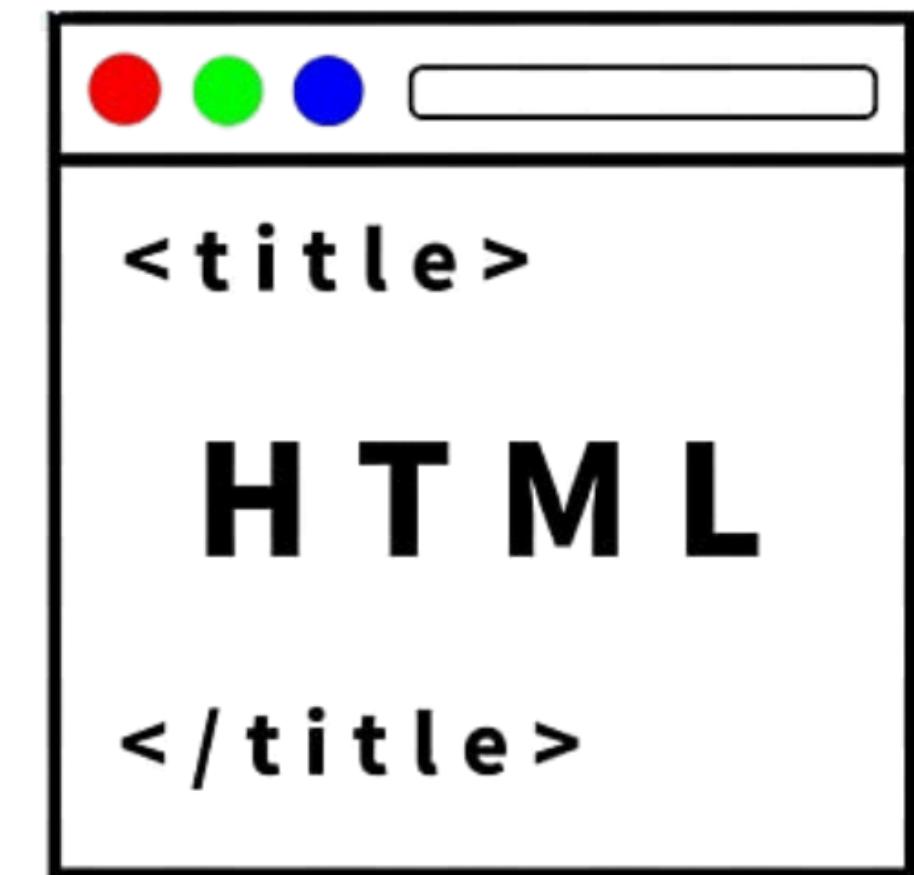
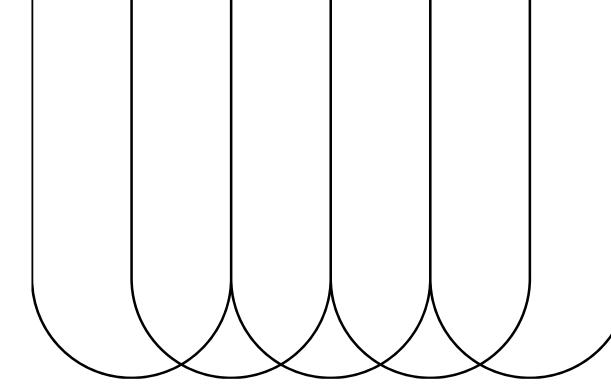


# HTML Elements & Text Formatting





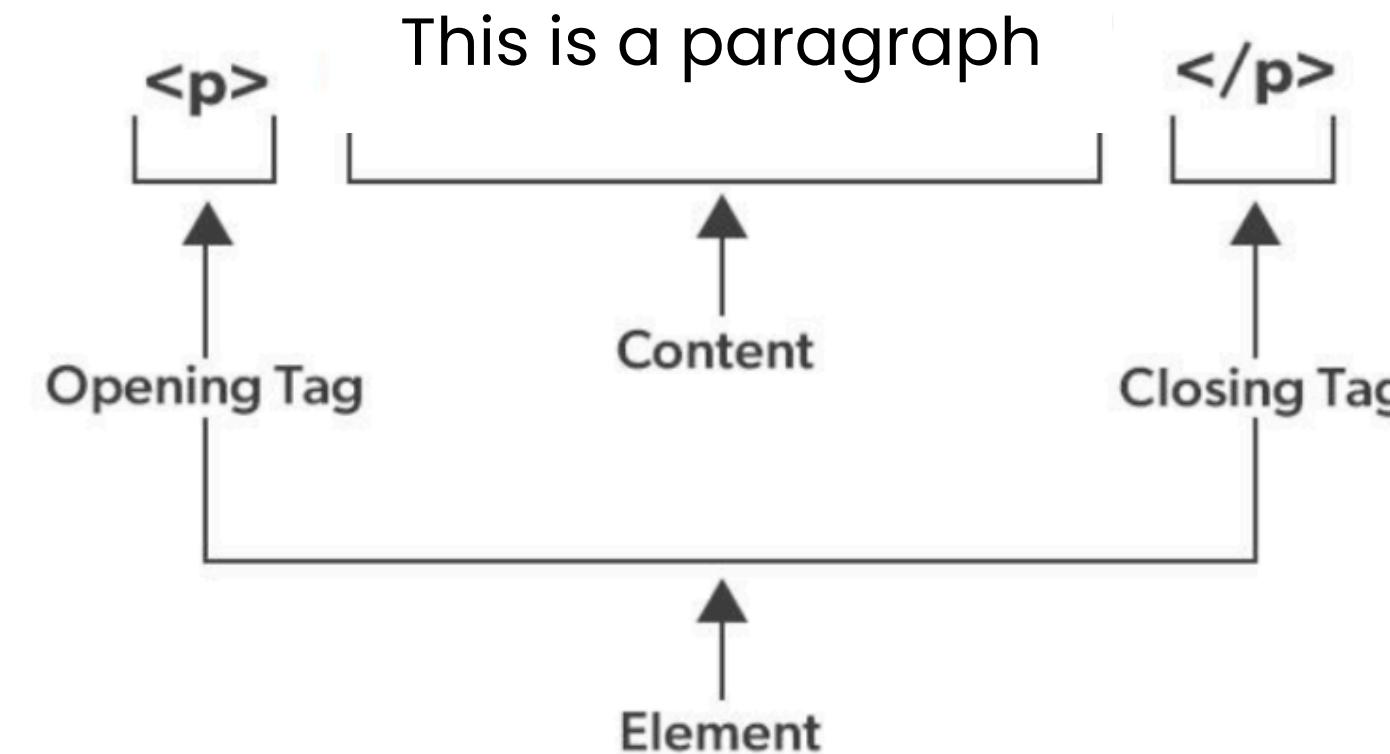
# HTML Elements

An HTML element is a fundamental building block of a webpage. It represents a part of the content or structure of the webpage and is defined by an opening tag, optional content, and a closing tag.

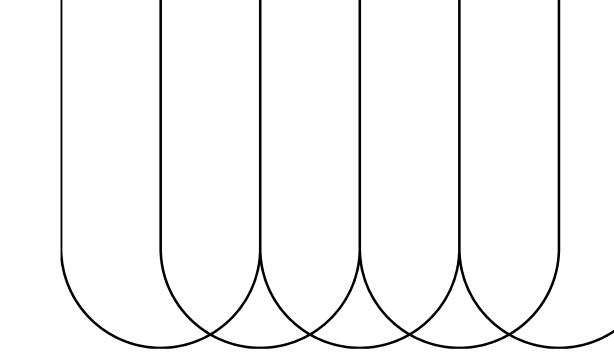
**Structure:** HTML Element = Start Tag + Content + End Tag

**Example:**

- <p> is the opening tag (for the paragraph element),
- "This is a paragraph" is the content
- </p> is the closing tag.



# Types of HTML Elements



## Block Level Elements

### These elements:

- Take up the full width of their container
- Start on a new line before and after
- Help structure larger sections of content

### Examples:

```
<div>, <p>, <h1>, <ul>, <section>, <article>
```

```
<body>
  <p>This is a paragraph.</p>
  <h1>This is a heading</h1>
</body>
```

This is a paragraph.

# This is a heading

Output

## Inline Elements

### These elements:

- Use only as much width as needed
- Don't break the flow of text
- Appear within lines, not stacked

### Examples:

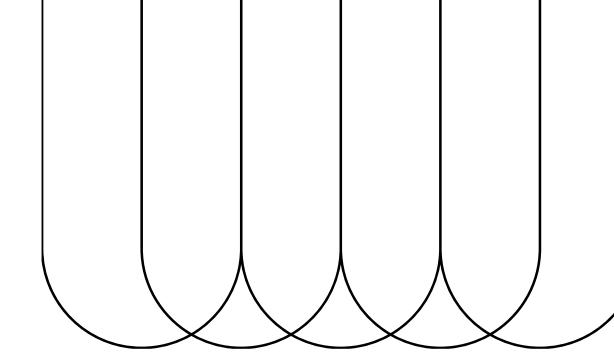
```
<span>, <a>, <strong>, <img>
```

```
<body>
  <p>This is a <strong>bold</strong> word.</p>
</body>
```

This is a **bold** word in a sentence.

Output

# Types of HTML Elements



## Empty (Self-closing) Elements

### These elements:

- ✂ Don't need a closing tag
- 🌟 Are used to add things, not wrap around text
- 🔐 Often used for images, line breaks, or form inputs

### Examples:

<img>, <input>, <br>

```
<body>
<h1>Hello <br> World</h1>
</body>
```

```
← → ⌂ ⌂ File C:/User
```

Hello  
World!

### Output

## Nested Elements

### These elements:

- 🔗 Are placed inside other elements
- 🟢 The outer element is the parent
- 🟠 The inner element is the child

This creates a structure that helps organize and display content properly

### Example:

```
<body>
| <p>This is a <strong>bold</strong> word.</p>
</body>
```

```
← → ⌂ ⌂ File C:/Users/se
```

This is a **bold** word in a sentence.

### Output

# Containers in HTML

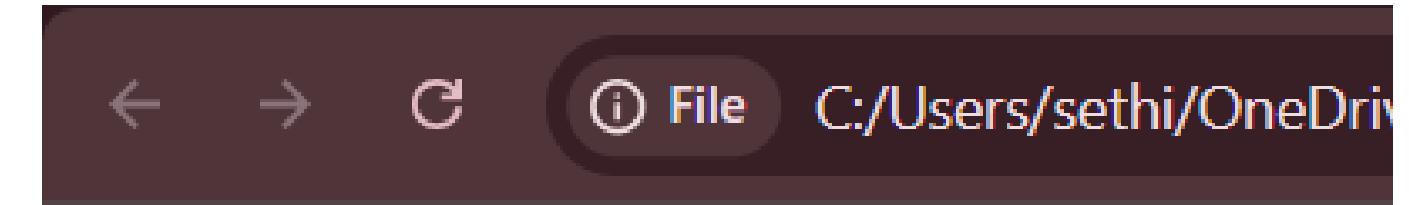
In HTML, containers are essential for organizing and grouping content. There are two types of containers Block Containers (`<div>`) & Inline Container `<span>`.

## Common Uses

- Grouping elements for layout (like creating sections of a page).
- Applying styles or JavaScript to a group of elements.
- Organizing content into logical sections of a webpage.

## Example:

```
7 <style>
8   span {
9     background-color: yellow;
10    font-weight: bold;
11  }
12 </style>
13 </head>
14 <body>
15   <h1>This is a heading</h1>
16   <p>This is a paragraph with a <span>highlighted word</span>.</p>
17 </body>
```



## This is a heading

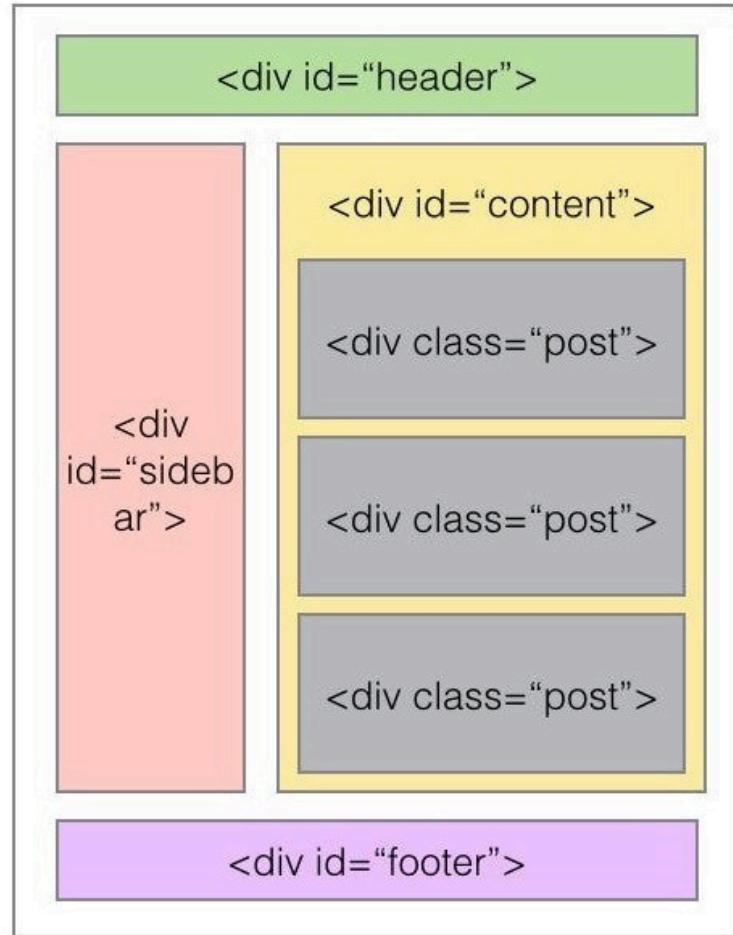
This is a paragraph with a **highlighted word**.

**Output**

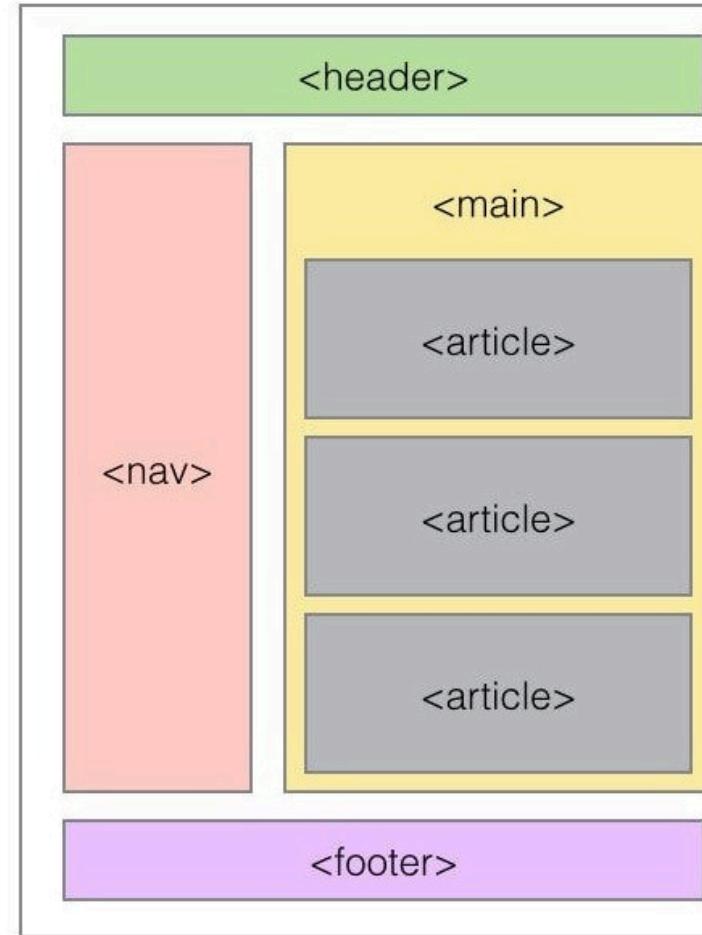
# Semantic Elements

Semantic elements are HTML tags that clearly describe the purpose of the content inside them. They make your code more meaningful, readable, and accessible for both browsers and developers.

## Non-Semantic



## Semantic

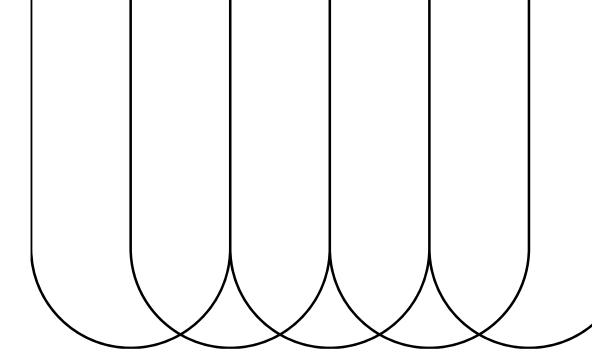


```
<body>
<!--before semantic-->
<div id="header">Welcome</div>
<div id="footer">Contact</div>
<!--After semantic-->
<header>Welcome</header>
<footer>Contact</footer>
</body>
```

This block displays the raw HTML code for both the non-semantic and semantic structures. The semantic version uses semantic HTML tags and includes comments indicating the transition between the two styles.

**Cleaner, clearer, and easier to understand.**

# Semantic Elements



## Why Use Semantic Elements?



### Accessibility

Semantic elements improve accessibility because they provide clear meaning for screen readers and other assistive technologies.



### Maintainability

Clear, meaningful HTML code is easier to maintain, especially for teams or future developers.

### Search Engine Optimization

Search engines can better understand the content of the page and rank it accordingly.

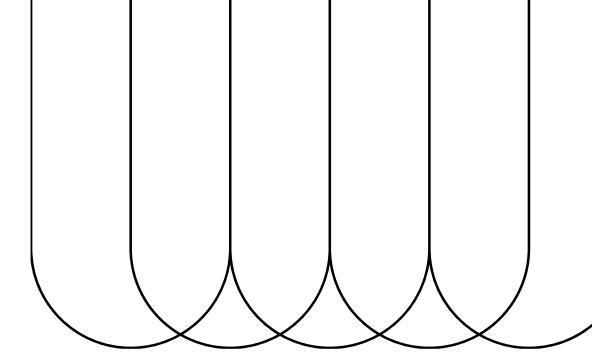


### Code Readability

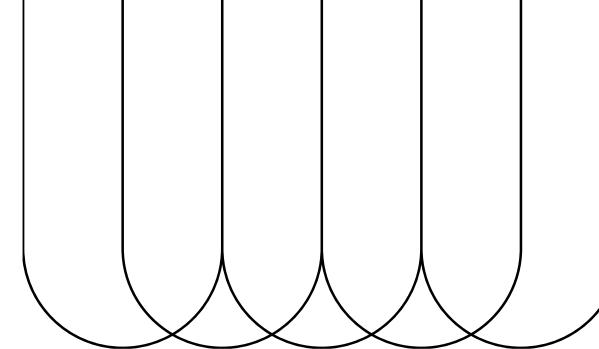
Semantic elements enhance code clarity by defining the structure and intent of the content, making it easier to interpret and maintain.



# Semantic Elements



Element	What it represents?	Example Use
<header>	For introductory content like logo and navigation	Logo, nav links
<nav>	To add navigation	Menus, links
<main>	To define the actual content of the page apart from header, sidebar and footer	Primary Content
<article>	To define Independent contents	Blog post
<section>	To group related contents	Grouping homepage features under one heading
<footer>	To define footer content	Copyright, links



# Text Formatting Tags

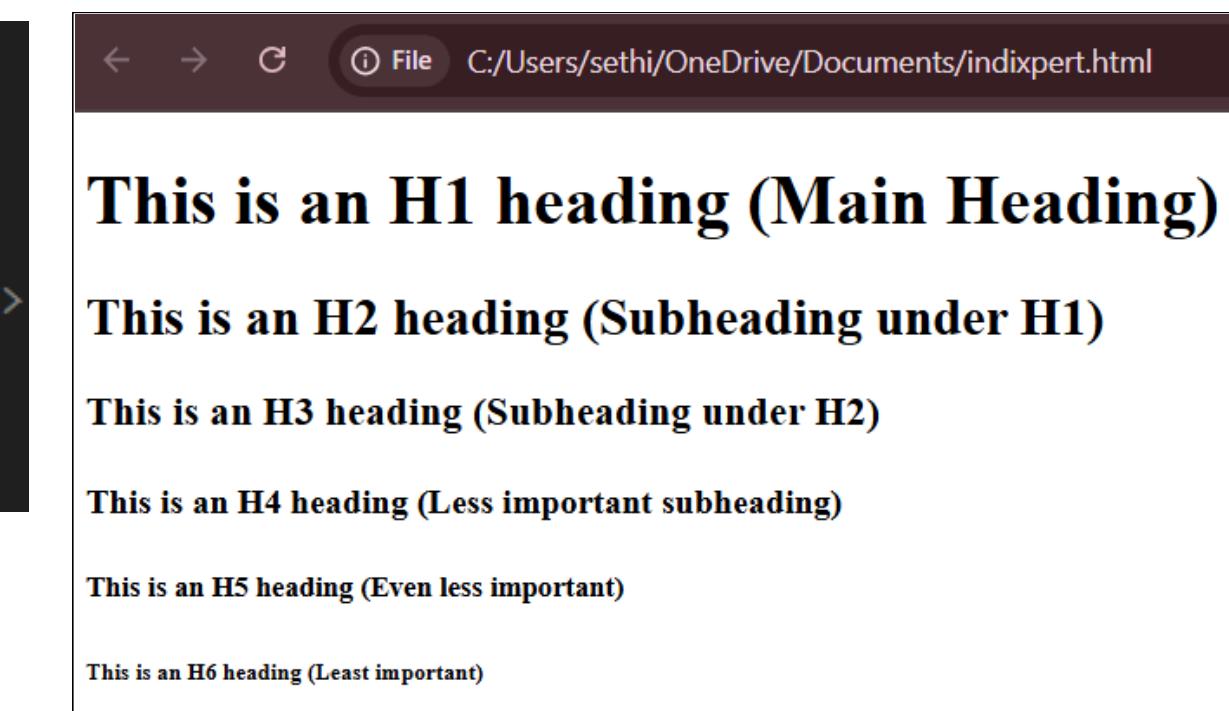
## Heading Tags

In HTML, heading tags from `<h1>` to `<h6>` are used to define section titles, with `<h1>` representing the most important heading and `<h6>` the least, typically used in a hierarchical order for structuring content.

## Example:

```
<body>
  <h1>This is an H1 heading (Main Heading)</h1>
  <h2>This is an H2 heading (Subheading under H1)</h2>
  <h3>This is an H3 heading (Subheading under H2)</h3>
  <h4>This is an H4 heading (Less important subheading)</h4>
  <h5>This is an H5 heading (Even less important)</h5>
  <h6>This is an H6 heading (Least important)</h6>
</body>
```

**Code**



This is an H1 heading (Main Heading)

This is an H2 heading (Subheading under H1)

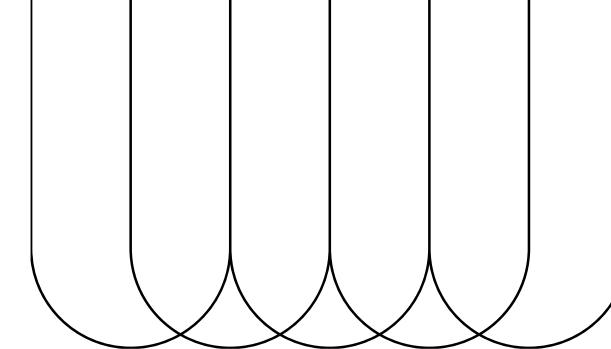
This is an H3 heading (Subheading under H2)

This is an H4 heading (Less important subheading)

This is an H5 heading (Even less important)

This is an H6 heading (Least important)

**Output**



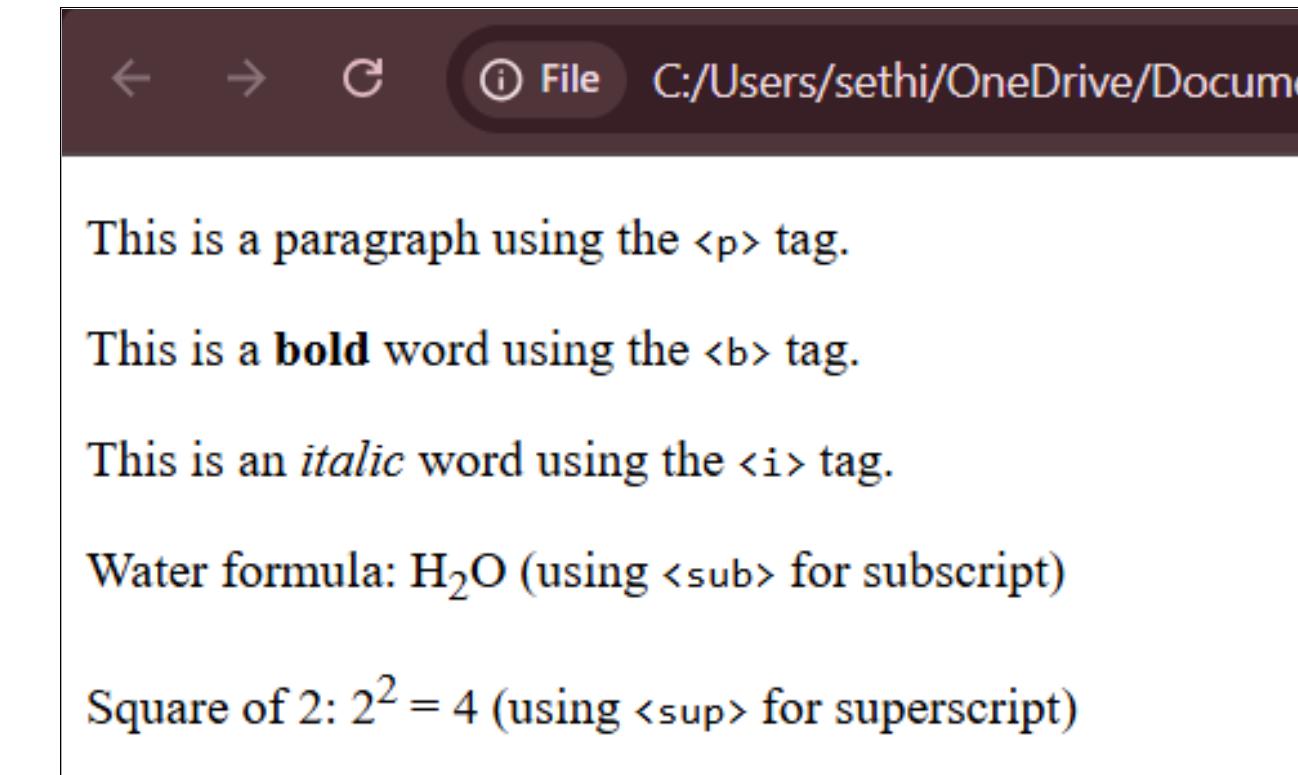
# Text Formatting Tags

## Paragraph Tag < p >

The < p > tag in HTML is used to define a paragraph of text. It is one of the most commonly used tags in HTML and is used to group and structure blocks of text in a document.

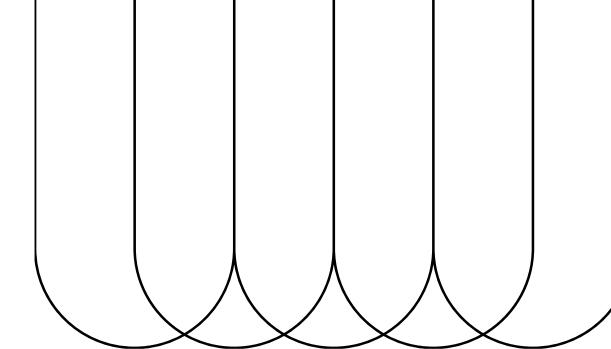
## Syntax:

- < p > – Defines a paragraph block
- < b > – Makes text bold (for visual emphasis)
- < i > – Makes text italic (used for style)
- < sub > – Subscript text (e.g., H<sub>2</sub>O)
- < sup > – Superscript text (e.g., 2<sup>2</sup>)



This is a screenshot of a web browser window. The title bar shows the file path: C:/Users/sethi/OneDrive/Documents. The main content area displays the following text:

This is a paragraph using the < p > tag.  
This is a **bold** word using the < b > tag.  
This is an *italic* word using the < i > tag.  
Water formula: H<sub>2</sub>O (using < sub > for subscript)  
Square of 2: 2<sup>2</sup> = 4 (using < sup > for superscript)



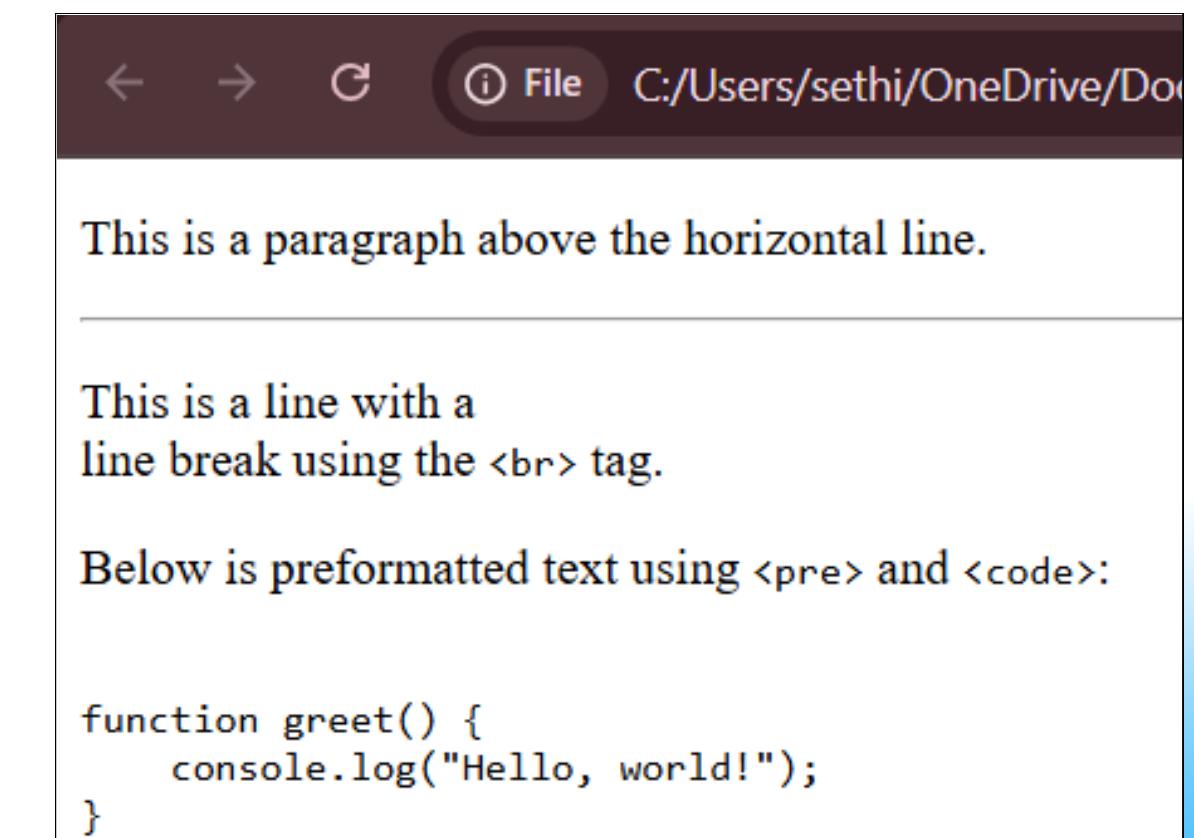
# Text Formatting Tags

-  `<hr>` – Adds a horizontal line to separate content
-  `<br>` – Inserts a line break (moves text to next line)
-  `<pre>` – Displays preformatted text with spaces and line breaks
-  `<code>` – Shows inline code in a monospaced font

## Example:

```
6 <body>
7   <p>This is a paragraph above the horizontal line.</p>
8   <hr> <!-- Horizontal line using <hr> -->
9
10  <p>This is a line with a<br>line break using the <code>&lt;br&gt;</code> tag.</p>
11
12  <p>Below is preformatted text using <code>&lt;pre></code> and <code>&lt;code></code></code></p>
13  <pre>
14  <code>
15  function greet() {
16    |   console.log("Hello, world!");
17  }
18 </code>
19 | </pre>
20 </body>
```

## Output:



This is a paragraph above the horizontal line.

---

This is a line with a  
line break using the `<br>` tag.

Below is preformatted text using `<pre>` and `<code>`:

```
function greet() {
  console.log("Hello, world!");
}
```

# Text Formatting Tags

## Anchor Tag <a>

The <a> tag is used to create hyperlinks in HTML. It allows users to navigate to another page, a section within the same page, or an external website using the href attribute to define the destination.

## Syntax/Example:

- 🌐 **href** – Specifies the link destination (required for hyperlink).
- ☒ **target** – Defines where the link opens (e.g., \_blank for new tab).
- ☒ **title** – Shows a tooltip with additional info on hover.
- ⬇️ **download** – Triggers file download instead of opening in the browser.



```
<body>
  <a href="https://www.indixpert.com" target="_blank" title="Visit Indixpert">
    Visit Indixpert
  </a>
```

Opens Indixpert's web-page



# THANK YOU

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