

# Text Formatting in HTML

Text formatting in HTML allows you to control the appearance of your text, adding emphasis, structure, and style. Here's a comprehensive look at the various HTML tags and techniques used for text formatting:

## 1. Basic Formatting Tags:

- **<p> (Paragraph):**
  - Defines a paragraph of text.
  - Browsers automatically add a blank line before and after each paragraph.
  - Example: `<p>This is a paragraph of text.</p>`
- **<br> (Line Break):**
  - Inserts a single line break within a paragraph.
  - It's an empty element (no closing tag).
  - Example: `<p>This is the first line.<br>This is the second line.</p>`
- **<hr> (Horizontal Rule):**
  - Creates a horizontal line that visually separates content.
  - It's an empty element.
  - Example: `<hr>`

## 2. Emphasis and Importance:

- **<strong> (Strong Importance):**
  - Defines text with strong importance, typically displayed in bold.
  - Indicates that the text has strong emphasis.
  - Example: `<p>This is <strong>important</strong>.</p>`
- **<b> (Bold):**
  - Defines bold text.
  - Used for stylistic purposes, without implying strong importance.
  - Example: `<p>This is <b>bold</b> text.</p>`
- **<em> (Emphasized Text):**
  - Defines emphasized text, typically displayed in italics.
  - Indicates that the text has emphasis.
  - Example: `<p>This is <em>emphasized</em>.</p>`
- **<i> (Italic):**
  - Defines italic text.
  - Used for stylistic purposes, without implying emphasis.
  - Example: `<p>This is <i>italic</i> text.</p>`
- **<mark> (Marked Text):**
  - Defines text that should be marked or highlighted.
  - Example: `<p>This text is <mark>highlighted</mark>.</p>`

## 3. Headings:

- **<h1> to <h6> (Headings):**

- Define headings of different levels, with <h1> being the most important and <h6> the least.
- Used to structure content and indicate hierarchy.
- Search engines use headings to index the structure and content of web pages.
- Example:

<h1>Main Heading</h1>

<h2>Subheading</h2>

<h3>Sub-subheading</h3>

**Output:**

# Main Heading

## Subheading

### Sub-subheading

#### 4. Quotations and Citations:

- **<q> (Short Quotation):**

- Defines a short inline quotation.
- Browsers typically insert quotation marks around the quoted text.
- Example: <p>He said, <q>Hello, world!</q></p>

- **<blockquote> (Block Quotation):**

- Defines a long quotation that is displayed as a separate block.
- Browsers typically indent the quoted text.
- Example:

HTML

<blockquote cite="https://www.example.com">

<p>This is a longer quotation from an external source.</p>

</blockquote>

- **<cite> (Citation):**

- Defines the title of a creative work (e.g., a book, song, movie, etc.).
- Example: <p><cite>The Hitchhiker's Guide to the Galaxy</cite> is a science fiction comedy series.</p>

## 5. Preformatted Text:

- **<pre> (Preformatted Text):**
  - Defines preformatted text, which is displayed in a fixed-width font and preserves spaces and line breaks.
  - Useful for displaying code or text with specific formatting.
  - Example:

HTML

```
<pre>
function myFunction() {
  console.log("Hello, world!");
}
</pre>
```

## 6. Subscript and Superscript:

- **<sub> (Subscript):**
  - Defines subscript text, which appears below the normal line.
  - Example: `<p>H<sub>2</sub>O</p>`
- **<sup> (Superscript):**
  - Defines superscript text, which appears above the normal line.
  - Example: `<p>x<sup>2</sup></p>`

## 7. Code and Computer Output:

- **<code> (Code):**
  - Defines a fragment of computer code.
  - Example: `<p>The <code>&lt;p&gt;</code> tag defines a paragraph.</p>`
- **<kbd> (Keyboard Input):**
  - Defines keyboard input.
  - Example: `<p>Press <kbd>Ctrl</kbd> + <kbd>C</kbd> to copy.</p>`
- **<samp> (Sample Output):**
  - Defines sample output from a computer program.
  - Example: `<p>Sample output: <samp>Hello, world!</samp></p>`

## 8. Text Styles Using CSS (Recommended):

While HTML provides basic formatting tags, it's generally recommended to use CSS for more advanced text styling. CSS allows you to control properties like:

- **font-family:** Specifies the font.

- **font-size:** Specifies the font size.
- **font-weight:** Specifies the font weight (e.g., bold).
- **font-style:** Specifies the font style (e.g., italic).
- **color:** Specifies the text color.
- **text-align:** Specifies the text alignment.
- **text-decoration:** Adds decorations like underlines.

## Example using CSS:

HTML

```
<!DOCTYPE html>
<html>
<head>
  <title>Text Formatting</title>
  <style>
    .emphasized {
      font-style: italic;
      color: red;
    }
  </style>
</head>
<body>
  <p>This is <span class="emphasized">emphasized</span> text using
  CSS.</p>
</body>
</html>
```

### Output:

This is *emphasized* text using CSS.

Tag	Description	Category
<b>	This tag is used to make the text <b>bold</b> .	Physical Tag
<i>	This tag is used to make the text <i>italic</i> .	Physical Tag
<big>	This tag is used to make the text bigger. It is <b>not supported in HTML5</b> .	Physical Tag
<small>	This tag is used to make the text smaller.	Physical Tag
<u>	This tag is used to underline text.	Physical Tag
<strike>	This tag is used to strike through text. It is <b>not supported in HTML5</b> .	Physical Tag
<tt>	This tag is used to make text appear in teletype (monospace font). It is <b>not supported in HTML5</b> .	Physical Tag
<strong>	This tag is used to bold text and give it <b>semantic importance</b> .	Logical Tag
<em>	This tag is used to italicize text and give it <i>semantic emphasis</i> .	Logical Tag
<sup>	This tag is used to make superscript text (slightly above the normal line).	Other Tag
<sub>	This tag is used to make subscript text (slightly below the normal line).	Other Tag
<ins>	This tag is used to indicate that content has been added (typically underlined).	Other Tag
<del>	This tag is used to indicate that content has been deleted (typically struck through).	Other Tag
<mark>	This tag is used to highlight text with a yellow background.	Other Tag