**Assignment 1**

**Problem statement :**

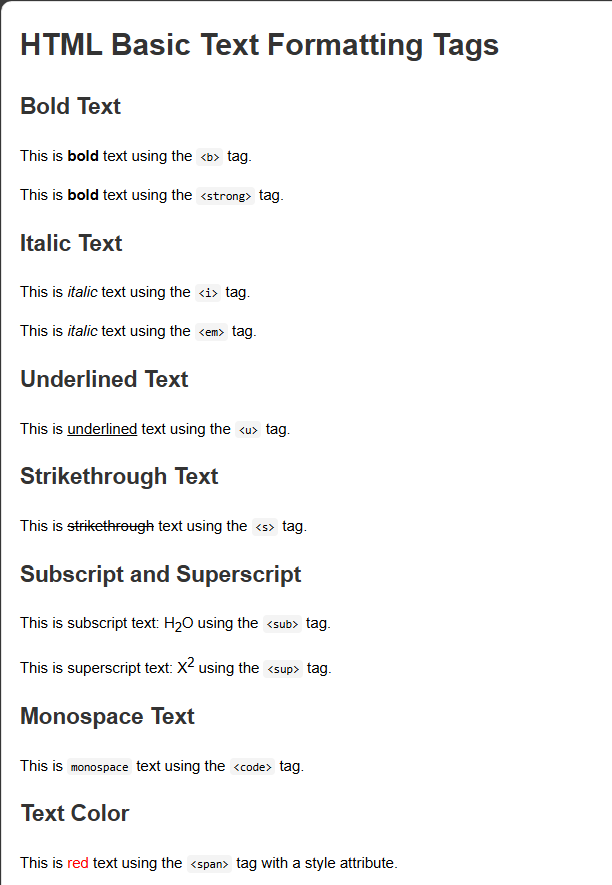
Program on HTML basic tags for text formatting.

The objective is to create a basic HTML page that demonstrates the use of various text formatting tags in HTML. The page should showcase how to format text in different styles such as bold, italic, underlined, strikethrough, subscript, superscript, and monospace. Additionally, the page should include a demonstration of how to apply color to text using inline CSS.

**Steps to Implement**

1. **Create the HTML Structure**:
   * Start by setting up a basic HTML structure using the <!DOCTYPE html>, <html>, <head>, and <body> tags.
   * Include the meta charset tag for character encoding and meta viewport tag to ensure responsiveness on different devices.
2. **Add Styling with CSS**:
   * In the <style> section inside the <head>, define basic styling for the webpage.
   * Set the font to a readable style like Arial and use line-height to make the text more readable.
   * Define custom styling for headers (<h1>, <h2>), paragraphs (<p>), and code snippets (<code>), including margin, padding, and background color for better visibility.
3. **Display Bold Text**:
   * Use the <b> and <strong> tags to display text in bold. Both tags visually render the text bold, but <strong> is semantically stronger and may carry different meaning for accessibility tools.
4. **Display Italic Text**:
   * Use the <i> and <em> tags to display text in italic. Similar to bold tags, <em> adds emphasis in a semantic way, while <i> is for stylistic italic.
5. **Display Underlined Text**:
   * Use the <u> tag to underline text. This tag is primarily for visual styling.
6. **Show Strikethrough Text**:
   * Use the <s> tag to display text with a line through it, indicating strikethrough text.
7. **Subscript and Superscript**:
   * Use the <sub> tag to display subscript text, typically used in scientific or mathematical notation, such as "H₂O" (water).
   * Use the <sup> tag to display superscript text, often used for exponents like "X²."
8. **Monospace Text**:
   * Use the <code> tag to display text in a monospace font, which is typically used to display code snippets or inline code.
9. **Apply Text Color**:
   * Use the <span> tag along with the style attribute to change the color of the text. In this example, the text is colored red using color: red;.
10. **Test the Webpage**:
    * Save the file with a .html extension and open it in a browser to view the result. The text should be formatted according to the tags used, and the page should display correctly with the defined styles and layout.

**Screenshot of output:**

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