**Task 1: CSS Processor**

A **CSS processor** is a tool that allows developers to write enhanced versions of CSS with features like variables, nested rules, mixins, and functions. After writing the enhanced code, a CSS processor compiles it into standard CSS that browsers can understand.

**Popular CSS preprocessors:**

* **Sass** (Syntactically Awesome Stylesheets)
* **LESS** (Leaner Style Sheets)
* **Stylus**

**Advantages of using a CSS processor:**

1. **Variables**: Store values for reuse.
2. **Nesting**: Write cleaner and more readable code.
3. **Mixins**: Reuse code snippets.
4. **Functions**: Perform calculations and manipulate styles dynamically.

**Example:**

**Preprocessor code (Sass):**

**scss**

$primary-color: #3498db;

.button {

background-color: $primary-color;

border-radius: 5px;

padding: 10px;

color: white;

&:hover {

background-color: darken($primary-color, 10%);

}

}

**Compiled CSS:**

**css**

.button {

background-color: #3498db;

border-radius: 5px;

padding: 10px;

color: white;

}

.button:hover {

background-color: #2980b9;

}

**Explanation**:

* $primary-color: Defines a variable.
* &:hover: Allows you to nest hover styles for better readability.
* darken(): A Sass function to manipulate colors.