**Assignment: Working with the Window Object**

In this assignment, you will create a simple web page that demonstrates your understanding of the Window object and its properties. You will be required to use the navigator, screen, location, sessionStorage, and localStorage properties of the Window object.

**Instructions:**

1. Create a new HTML file called index.html.
2. Add a <script> tag to the bottom of the <body> element to include your JavaScript code.
3. In your JavaScript code, create a function called displayWindowProperties().
4. In the displayWindowProperties() function, use the console.log() method to display the following information about the Window object properties:

* navigator.userAgent
* screen.width and screen.height
* location.href and location.pathname
* sessionStorage and localStorage properties. You can store and retrieve any data to/from sessionStorage and localStorage.

1. Call the displayWindowProperties() function when the page loads.

**Example Input and Output:**

**Input:**

- User visits index.html page.

**Output:**

- The following properties of the Window object are displayed in the console:

- User agent string

- Screen width and height

- Current URL and path

- Data stored in sessionStorage and localStorage

**Hints:**

* Use the window.navigator.userAgent property to display information about the user agent string of the browser.
* Use the window.screen.width and window.screen.height properties to display the screen dimensions.
* Use the window.location.href and window.location.pathname properties to display the current URL and path of the page.
* Use the window.sessionStorage and window.localStorage properties to store and retrieve data in the browser's session and local storage.
* Make sure to use console.log() method to display the properties in the console.

**Best Practices:**

* Use let or const to declare variables.
* Use descriptive variable names.
* Write clear and concise comments in your code.
* Test your code thoroughly before submitting.
* Follow consistent coding style and indentation throughout the code.