Web Assignment 1

Basic HTML -> JS

Q1) **HTML & Variable Update**

* **Task:**
  + Create an HTML page with a header (<h1>) and a paragraph (<p id="message">).
  + In JavaScript, declare a variable (e.g., let greeting = "Hello, World!") and use DOM manipulation to update the paragraph text with this value.

Q2) **Bonus: Interactive Counter**

* **Task:**
  + Create two buttons: “Increment” and “Decrement”.
  + Declare a counter variable (e.g., let count = 0) and display its value in a <span>.
  + Write functions to update and display the counter when each button is clicked.

Q3 **Make a Calculator**

* **Task:**
  + Create four separate functions in JavaScript for addition, subtraction, multiplication, and division.
  + Each function should accept two parameters and return the result.
  + Call these functions with different numbers and log the results to the console.

Q4) **HTML & Variable Update**

* **Task:**
  + Create an HTML page with a header (<h1>) and a paragraph (<p id="message">).
  + In JavaScript, declare a variable (e.g., let greeting = "Hello, World!") and use DOM manipulation to update the paragraph’s text with this value.

Q5) **Display Array Items in an HTML List**

* **Task:**
  + Create an HTML page with an empty unordered list (e.g., <ul id="list"></ul>).
  + In your JavaScript, declare an array with several items (for example, names of your favorite animals).
  + Write a function that loops through the array and, for each item, creates a new list element (<li>), sets its text to the array item, and appends it to the unordered list.
* **Reference YouTube Video:**  
  [JavaScript DOM Tutorial for Beginners - Programming with Mosh](https://www.youtube.com/watch?v=0ik6X4DJKCc)

Q6) **Toggle Element Visibility**

* **Task:**
  + Create an HTML page with a button and a content element (such as a <div> or <p>).
  + Write a JavaScript function that toggles the visibility of the content element each time the button is clicked. (Hint: You might change the element’s CSS display property between "none" and "block" or "inline".)
* **Reference YouTube Video:**  
  [JavaScript Crash Course for Beginners - Traversy Media](https://www.youtube.com/watch?v=hdI2bqOjy3c)

Here are some short YouTube video links covering HTML, JavaScript, JavaScript Arrays, DOM manipulation, and related topics:

* **HTML Guide:** <https://youtu.be/UB1O30fR-EE>
* **JavaScript Guide:** <https://youtu.be/hdI2bqOjy3c>
* **JavaScript Arrays:** <https://youtu.be/R8rmfD9Y5-c>
* **JavaScript DOM Tutorial:** <https://youtu.be/0ik6X4DJKCc>
* **Build a Calculator in JavaScript:** <https://youtu.be/ox8qRJJoxkI>