WEB-215 Project 3

1. Read Chapter 3 and complete all tutorials if you haven't done so already.
2. Create a valid HTML document named **Last-First-Proj3.htm** (substitute your first/last name)
3. Link to an external JavaScript file named **Last-First-Proj3.js** (substitute your first/last name)
4. Apply best practices to your JS code, including:
   - Ending statements with semicolons
   - Use of tabs and spaces
   - Maintaining code readability
   - Use of comments only when necessary/required
   - Consistency with quotes
5. Complete the following exercises in your JS file, beginning each one with a comment stating the exercise title and a "dashed line paragraph block". For example:

```
// Conditionals
document.write('<p> - - - - - - - - - - - - - - - - - - - - </p>');
```

Conditionals

if

1. Use the following variables for this exercise:
   a. `stock` = 100
   b. `sold` = 20
2. Create an ***if*** statement that tests to see if there are any items still left in stock. If there are, calculate and display the number of remaining items.

The output should display a single line using document.write().

if-else

1. Use the following variables for this exercise:
   a. `expression` = 5+2
   b. `solution` = 7
2. Create an ***if*** statement that tests to see if the expression and the solution are equal. If they are, display a message saying "Congratulations". If they aren't, display a message saying "Incorrect".
3. Duplicate steps 1 and 2 in another code block, but change the *solution* variable to 99.

The output should display 2 lines – each with a different message – using document.write().

else-if

1. Use the following variable for this exercise:
   a. `total` = 76
2. Test if the total is more than 100 and if it is, display the text "*Total* is more than 100". Otherwise, if the total is only more than 50, display the text "*Total* is greater than 50 but not more than 100". Otherwise, just display the text "*Total* is small". In each case, replace the word "*Total*" with the actual value of the total variable.
3. Duplicate the code block, update the total to 125 and repeat step 2.
4. Duplicate the code block, update the total to 31 and repeat step 2.

The output should display 3 lines – each with a different message – using document.write().

Multiple conditions

1. Use the following variable for this exercise:
    a. `salary` = 80000
2. Create an ***if*** statement that tests if the salary is between 70,000 and 1,000,000. If it is, display a message saying "Good salary". Otherwise, display a message saying "Keep saving".
3. Duplicate the code block, update the salary variable to contain the value 30000 and repeat step 2.

The output should display 2 lines – each with a different message – using document.write().

Loops

while

1. Complete the while loop so new lines are output sequentially, showing the number 1, then 2, then 3, and so on until the number 5 is displayed. The number 6 should not display. **Do not modify code in bold green.** *Do modify code in italic orange*. Use 'num' as your variable name.

```
variable assignment;
while(condition) {
  possible code…
  document.write(num + '<br>');
  possible code…
}
```

do – while

1. Rewrite the code above using a ***do-while*** loop instead.

for

1. Use a ***for*** loop to display each member of the following array on its own line:
    a. `arrPlanets` = ["Mercury", "Venus", "Earth", "Mars", "Jupiter", "Saturn", "Uranus", "Neptune", "Pluto"]

Functions

Be sure to adhere to best practices regarding the use of local and global variables.

Functions and arguments

1. Create a function that takes a single argument and displays it on its own line using document.write().
2. Call the function, passing it a string to display.
3. A new line should display the passed string.

Multiple arguments

1. Create a function that takes two numbers as arguments, multiplies the numbers, and returns a result – storing it in a variable named **finalProduct**.
2. Call the function, passing it two integers.
3. No output should display. The final result is simply stored for later use.

Testing before Submission

- Load your HTML file in a browser.
- Make sure the JavaScript all works and the HTML validates.
- Place all your HTML and JS files in a folder named **Last-First-Proj3**. File naming must be exact! (But use your own first/last name.) Zip the folder and upload via Moodle.