Quick Lab 3b - JavaScript Loops

Objectives

* To investigate JavaScript looping statements.

Activity

1. In VSCode, create the file loops.html and loops.js in a new folder, import the js file using a script tag then open the html using live server.

The browser window will open, but there will be nothing to view!

The for loop has three arguments: the counter, the condition and the iterator. You are going to code in a simple for loop where the following properties need to be set:

|  |  |
| --- | --- |
| parameter | value |
| counter | Variable name i set to 1 |
| condition | i is less than 10 |
| iterator | Each loop must add 1 to the value of i |

1. Enter the following code, amended appropriately to achieve this:

for (counter; condition; iterator) {

console.log(i);

}

1. How many times do you expect the loop to execute? \_\_\_\_\_\_\_\_\_\_\_
2. Save the file and observe the output in the browser to check your assumptions.
3. Write a while loop that has the following rules:

|  |  |
| --- | --- |
| parameter | value |
| initial conditions | Variable name x set to 2 and loopCounter set to 0 |
| condition | x is less than 10000 |
| iterator | Each loop must square the value of x and add 1 to loopCounter |
| action | Each loop must log out the value of x and loopCounter |

1. Once you have resolved this, save the code and observe the output in the browser.

Further activities

Only attempt the further activities, if there is sufficient time remaining. Your instructor can help you with these if you need it, but we hope you can start ranging out on your own.

1. Check what happens when you enter a value that does not match any of the or short circuit you created in Part 3.
2. Alter the for loop you created in Part 4 of the exercise to count down rather than up.

This is the end of Quick Lab 3b