**Lesson 7 - JavaScript: A Solid Introduction**

**Homework**

**Questions**

For questions in which you are instructed to provide the output of a program, try your best to do it from memory, rather than plugging it into the JavaScript console, or running an html program.

1. Please provide the output of the following program.

var test;

console.log(test);

1. **True/False -** According to best practices, it’s okay to forget a semi-colon at the end of a javascript statement every once in awhile.
2. Please provide the output of the following program.

function mod(x) {

return x % 3;

}

console.log(mod(20));

console.log(mod(3));

console.log(mod(1));

console.log(mod(0));

1. Please provide the output of the following program.

var a = 55 + 5;

var b = 55 + “5”;

console.log(a);

console.log(b);

1. In an HTML document, where does it make the most sense to put <script> tags?
2. When does it make sense to use // comments? When does it make sense to use /\* \*/ comments?
3. What is the difference between pascal case and camel case? When might you want to use each?
4. When is it ok to use window.alert() or simply… alert() ?
5. In google Chrome, how do you open the JavaScript console?
6. Please provide the output of the following program.

var a = 10;

var b = a \* 2;

var c = a \* 3;

var d = b + 3;

var e = a + b + c + d;

var f = e + “” + 10;

console.log(f);

1. What is the difference between **variable declaration** and **variable assignment** ?
2. Please provide the output of the following program.

var i = 0;

i++;

console.log(i++);

1. Please provide the output of the following program.

var a = 3;

a \*= 5;

console.log(a);

var b = 10;

b /= 2;

console.log(b);

1. What does it mean to concatenate two strings?
2. In JavaScript, please explain what each of the following operators do: =, ==, ===
3. **True/False** - when adding a number and a string, JavaScript will treat the number as a string?

**Project**

Please create two files

* Index.html
  + Pretty much just <html><head><body><script>
* Index.js
  + Should contain the following….

function isPrimeNumber(num) {

// return true if number is prime

// return false if number is not prime

}

function max(number1, number2) {

// returns the number which is bigger

}

function swapValuesInArray(inputArray, arrayIndexA, arrayIndexB) {

// takes an input array

// swaps values in the array at the specified positions

// returns “inputArray” with swapped values.

}

function sortArray(inputArray) {

// given an unsorted array

// loop through each item (use ‘i’ for the outer loop)

// start at item 0

// loop through each item again use (‘j’ for the inner loop)

// start at item ‘i’

// use your new swapValuesInArray function to help out

}