# Week02 Notes

## Chapter 2: Programming Basics

Symbols are unique IDs for variables

Non-primitive objects share values by reference, if a and b both equal non-primitive object c, then anytime sometime is edited in a,b, or c will result in a change to all objects because they are references to the same object. Pointers.

Chapter 3: Arrays, Logic, and Loops

Deleting an item in an array makes the item at that index *undefined* and the memory at that index is still allocated.

Numbers are Sorted Alphabetically? Why?

WeakSet() will will garbage collect andy dead object references.

Only add non-primitive data types to WeakSets

Ternary operator ?

Condtional statement ? True outcome : false outcome;

Chapter 4: Functions

Computers have rounding errors when trying to divide anything other than 2 due to base 2 binary system

*Arguments* variable contains an array of all the arguments passed to a function

\*\*for group project, look at *Improved Mean Function* using the *rest* (…) operator to contain all variables into an array

Default value, declare value in parameter

function square(x){ === const square = x => x\*x;

return x\*x;

}

const square = x => x\*x;

Both of these functions are the same.

Hoisting will take a declaration and place it at the top of the scope but not move the assignment of the variable. VAR is a always hoisted. LET or CONST are not

Function callbacks, you can send a function as a parameter to a function

Can be used to specify how you want a particular function to act, sorting numbers for example, how do you want them to be sorted? Write a callback function to your sort method.

${i} gets a string literal of i

Chaining Iterators

You can chain functions and callbacks together just use . operator and method call after

Callbacks can be used to adjust or edit the functionality of any function so they can be readily used for multiple situations