## Week 3 Research Assignment

**What is the difference between == and ===??**

== is the abstract equality comparison operator. It converts the two elements being compared to the same type before comparing their values, thus comparing their values only. === is the strict comparison operator that compares both the value and the type of the elements being compared. Both comparison operators will return Boolean values.

**Select five methods that can be used on an Array and describe the following for each: 1) what the method signature is, 2) what the method does, and 3) why would this method be useful (how could you use it)?**

The five array methods that we focused on this week were map, reduce, for each, filter, and splice.

**map method**

Signature: Array.prototype.map()

The map method invokes a function foe each element in an array and creates a new array from the returned value. This method is useful when you want to transform data in an array.

**reduce method**

Signature: Array.prototype.reduce()

The reduce method takes all of the values in an array and reduces them down to one value. This method is useful for finding the sum or the average of values in an array.

**forEach method**

Signature: Array.prototype.forEach()

The forEach method invokes a function for each element in an array, but does not return a new array. A reason you would want to use this method is to apply something to each element of an array without returning the new values.

**filter method**

Signature: Array.prototype.filter()

The filter method invokes a Boolean value on each element in an array and will return a new array with all values that return true. This method would be useful in trying to pull out all values that meet a certain criteria within an array.

**splicemethod**

Signature: Array.prototype.splice()

The splice method changes the contents of an array by removing, replacing or adding elements of an array. It changes the content in place and does not create a new array. This method is useful when you need to modify the contents of an existing array.

**Sources**: <https://stackoverflow.com/questions/359494/which-equals-operator-vs-should-be-used-in-javascript-comparisons>, <https://codeahoy.com/javascript/2019/10/12/==-vs-===-in-javascript/#:~:text=The%20difference%20between%20%3D%3D%20and%20%3D%3D%3D%20is%20that%3A,the%20two%20variables%20being%20compared>, <https://developer.mozilla.org/en-US/>