**Maps and Sets Exercise**

**Quick Question #1**

What does the following code return?

**new** Set([1,1,2,2,3,4])

**1.) {1,2,3,4}**

**Quick Question #2**

What does the following code return?

[...**new** Set("referee")].join("")

**1.) “ref”**

**Quick Questions #3**

What does the Map ***m*** look like after running the following code?

**let** m = **new** Map();

m.set([1,2,3], **true**);

m.set([1,2,3], **false**);

**1.) 0: {Array(3) => true}**

**1: {Array(3) => false}**

**hasDuplicate**

Write a function called hasDuplicate which accepts an array and returns true or false if that array contains a duplicate

hasDuplicate([1,3,2,1]) *// true*

hasDuplicate([1,5,-1,4]) *// false*

**1.) const hasDuplicate = (array) => new Set(array).size !== arr.length;**

**vowelCount**

Write a function called vowelCount which accepts a string and returns a map where the keys are numbers and the values are the count of the vowels in the string.

vowelCount('awesome') *// Map { 'a' => 1, 'e' => 2, 'o' => 1 }*

vowelCount('Colt') *// Map { 'o' => 1 }*

**1.)**

**const vowel = (char) => {**

**return “aeiou”.includes(char);**

**}**

**function vowelCount(string) {**

**const vowels = new Map();**

**for(let char of string){**

**let lowercaseChar = char.toLowerCase();**

**if(vowel(lowercaseChar){**

**if(vowels.has(lowercaseChar){**

**vowels.set(lowercaseChar, vowels.get(lowercaseChar) + 1);**

**} else {**

**Vowels.set(lowercaseChar, 1);**

**}**

**}**

**}**

**return vowels;**

**}**