Maps and Sets Exercise

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Reference: SpringBoard solution, vowels function

Quick Question #1

What does the following code return?

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

[1,2,3,4]
```

Quick Question #2

What does the following code return?

```
[... new Set("referee")].join("")
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 );

//Just showing what is inside the array althought it would
//Only show array with them amount of values so Array(3)
0: (Array([1,2,3]), value: true)
1: (Array([1,2,3]), value: false)
```

hasDuplicate

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

Maps and Sets Exercise 1

```
hasDuplicate([1,3,2,1]) // true hasDuplicate([1,5,-1,4]) // false
```

```
dup = arr => new Set(arr).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' \Rightarrow 1, 'e' \Rightarrow 2, 'o' \Rightarrow 1 \} vowelCount('Colt') // Map \{ 'o' \Rightarrow 1 \}
```

```
function vowel(char){
    return "aeiou".includes(char);
}
function vowels(str){
   const newVowelCount = new Map();
   for(let c of str){
       if(vowel(c)){
            //checking to see if it already exists
            if(newVowelCount.has(c)){
                newVowelCount.set(c, newVowelCount.get(c) + 1);
            //else set it with a value of 1
            }else {
                newVowelCount.set(c, 1);
            }
    }
   return newVowelCount;
}
```

Maps and Sets Exercise 2