



Maps and Sets Exercise

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);

/*
  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

const hasDuplicate = 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' => 1, 'e' => 2, 'o' => 1 }
vowelCount('Colt') // Map { 'o' => 1 }

function isVowel(char){
  return "aeiou".includes(char);
}

function vowelCount(str){
  const vowelMap = new Map();
  for(let char of str){
    let lowerCaseChar = char.toLowerCase()
    if(isVowel(lowerCaseChar)){
      if(vowelMap.has(lowerCaseChar)){
        vowelMap.set(lowerCaseChar, vowelMap.get(lowerCaseChar) + 1);
      } else {
        vowelMap.set(lowerCaseChar, 1);
      }
    }
  }
  return vowelMap;
}
```