

Maps and Sets Exercise

Quick Question #1

What does the following code return?

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

```
Set(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);
```

```
Map(2) {Array(3) => true, Array(3) => false}  
  [[Entries]]  
    0: {Array(3) => true}  
      key: (3) [1, 2, 3]  
      value: true  
    1: {Array(3) => false}  
      key: (3) [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

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

```
const hasDuplicate=(arr)=>[...new Set(arr)].length!==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 }
```

```
const vowelCount = (str) => {
  const myMap = new Map();
  let lowerStr = str.toLowerCase();
  let vowels = new Set("aeiou");
  for (let letter of lowerStr) {
    if (vowels.has(letter)) {
      myMap.has(letter)
        ? myMap.set(letter, myMap.get(letter) + 1)
        : myMap.set(letter, 1);
    }
  }
  return myMap;
};
```

Solution

See [Our solution](#).