

## COMP 3123 – Full Stack Development I – Lab 2

- ES6 Practice Exercises

### Developer Note:

- Try to solve the problems without using search engines or stack overflow for the solutions.

### Exercise 1:

- Rewrite the following code block using ES6 syntax, *ie. const, let, arrow function, template literals and for..of*

```
function gretter(myArray, counter) {  
    var greetText = 'Hello '  
    for (var index = 0; index < myArray.length; index++) {  
        console.log(greetText + myArray[index]);  
    }  
}  
gretter(['Randy Savage', 'Ric Flair', 'Hulk Hogan'], 3);
```

### Exercise 2:

- Using destructuring assignment syntax and the spread operator, write a function will capitalize the first letter of a string.

```
console.log(capitalize('fooBar'));  
console.log(capitalize('nodeJs'));
```

```
// Output  
Foobar  
Nodejs
```

### Exercise 3:

- Using **array.proto.map** create function to use the capitalize method in Exercise 2 to upper case the first character of each Color in the following array..

```
const colors = ['red', 'green', 'blue']
// code...
console.log(capitalizedColors)

// Output
['Red', 'Green', 'Blue']
```

### Exercise 4:

- Using **array.proto.filter** create a function that will filter out all the values of the array that are less than twenty.

```
var values = [1, 60, 34, 30, 20, 5]
// Code...
console.log(filterLessThan20)
// Output
// [1, 5]
```

### Exercise 5:

- Using **array.proto.reduce** create calculate the sum and product of a given array.

```
var array = [1, 2, 3, 4]
// Code ..
console.log(calculateSum);
console.log(calculateProduct);
// Output
10
24
```

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### Exercise 6:

- Using ES6 syntax for class and subclass using extends to create a Sedan subclass which derives from Car Class. The parameters for the Car class is the model and year. The parameters for the subclass is the model, year and balance.
- Use the super key word in the Sedan subclass to set the model and name in base Car constructor.

```
const car2 = new Car('Pontiac Firebird', 1976);
console.log(car2.details());
// Subclass - extends Car super class
const sedan = new Sedan('Volvo SD', 2018, 30000);
console.log(sedan.info());

// Output
//Model: Pontiac Firebird Engine 1976
// Volvo SD has a balance of $30000.00
```