Week 3 | Day 2 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. Create a function that takes in two strings as arguments and returns a concatenated string. Example:

// concFunc("fire", "man") -> "fireman"

// 2. Create a function that takes in a string and returns a substring 4 characters long. Example:

// subFunc("bullwinkle") -> "bull"

// 3. Create a function that takes in a string of multiple words and returns the first word with "ish" added to the end. Example:

// ishFunc("Soup is my favorite.") -> "Soupish"

# Week 3 | Day 3 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. **Create a function** that takes **2 numbers as arguments**, adds them together and logs the sum to the console. Example:

// sumFunc(2, 3) -> 5

// 2.**Create a function** that takes **1 number as an argument**, multiplies it by itself and logs the product to the console. Example:

// numSquared(3) -> 9

// 3.**Create a function** that takes **1 number as an argument**and checks to see if it is even or odd. If it is even, **return true**, if it is odd **return false**. Example:

// isEven(14) -> true

Week 3 | Day 4 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. Create an array and show how to log each element to the console. Example:

// [2, "cats", 14, "dinosaur"]  
// 2  
// cats  
// 14  
// dinosaur

// 3. Create an array. Using the .forEach() method on the array, print each element to the console. **If you are unsure on how to use .forEach(), Google.** Example:

// [2, "cats", 14, "dinosaur"]  
// 2  
// cats  
// 14  
// dinosaur

// 2. Create an array. Create a function that **takes an array as an argument** and logs **only** the first element and last element to the console. Example:

// lastFirst(["dogs", "cats", "hamburger", "dinosaur"])  
// dogs  
// dinosaur

# Week 3 | Day 5 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. Create a for loop that starts at 1 and ends at 10. Each time it loops it logs in the console which loop it is. Example:

// This is loop 1.

// This is loop 2.

// This is loop 3.

// etc...

// 2.Create a loop that will loop 10 times. Each time it loops log in the console whether it is an even loop or an odd loop. Example:

// 1 this is an odd loop.

// 2 this is an even loop.

// 3 this is an odd loop.

// etc...

// 3. Create a loop that iterates over an array of strings. For the first index log to the console the value. On the next log to the console a message of your choice. Repeat this pattern through the entire array. Example:

// var myArr = ["Hippo", "Rhino", "Monkey", "Zebra", "Tiger"];  
// Your loop results:  
// Hippo  
// this is my message!  
// Monkey  
// this is my message!  
// Tiger

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# Week 4 | Day 1 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. **Create an object** that represents you. It should have at least 3 attributes. Show how you can see the attributes in the console. Example:

// me.first\_name -> "steven"  
// me.eye\_color -> "brown"

// 2.Using the object from the problem 1, **add a method** that logs a message to the console. Example:

// me.speak() -> "Hello!"

// 3. Using the object from the problem 1,**add another method** that logs a message to the console that includes your object attributes. Example:

// me.about\_me() -> "Hello my name is steven rayesky and my eye color is brown."

# Week 4 | Day 4 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1.**Create a function that takes an array**. Check to see if it contains a 5 or 6. If it does, return true, otherwise return false. Example:

// checkNums( [1, 3, 5, 12, 22] ) -> true  
//checkNums( [30, 99, 8, 22, 7] ) -> false

// 2. Create a function that takes an array. If an array element is equal to 5, set it to 0. Example:

// noFive( [2, 17, 5, 18, 6, 5] ) -> [2, 17, 0, 18, 6, 0]

// 3. Create a function that **takes two arrays**, each having elements that are numbers. Compare the sum of the numbers in each array. Return the array with the largest sum. Example:

// bigArray( [1, 5, 9], [2, 12, 3] )-> [2, 12, 3]

# Week 4 | Day 5 Coding Challenge

**Goal:**

Practice solving JavaScript problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1.Create a function that**takes a number**. Return true if the given  number is a multiple of 3 or 5, but not both. Example:

// eitherNum( 6 ) -> true  
// eitherNum( 10 ) -> true  
// eitherNum( 15 ) -> false

// 2. Create a function that **takes 3 numbers as arguments**. Return true if **any** two of the numbers added together equal the third. Example:

// twoEqualOne(1, 2, 3) -> true  
// twoEqualOne(10, 7, 3) -> true  
// twoEqualOne(9, 5, 3) -> false

// 3. Create a function that**takes 2 numbers as arguments**. Return true if there is a digit that appears in both numbers. Example:

// sameDigit(5, 65) -> true  
// sameDigit(23, 82) -> true  
// sameDigit(85, 49) -> false

# Week 5 | Day 1 Coding Challenge

**Goal:**

Practice writing HTML/CSS.

**Assignment:**

This challenge has a single page that needs to be created and styled using CSS. You may use any libraries you like. A zip file will be posted to Slack with a mockup and images that you will need for the assignment.

Pay close attention to detail. Positioning of elements relative to one another is important as well as font-size and transformations.

Resubmit the folder as a zip with necessary files added (.html, .css, libraries etc.)

# Week 5 | Day 2 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. write a function that takes two arguments, adds them and checks if the sum is more than 100. Example:

// more\_than( 50, 22 ) -> false  
// more\_than( 10, 99 ) -> true  
// more\_than( 15, 12 ) -> false

// 2. Write a function that takes an array of numbers and creates a new array with only the even numbers from the first array. Example:

// only\_even([1,2,3,4,5,6]) -> [2, 4, 6]  
// only\_even([22,38,41,5,3610]) -> [22, 38, 3610]  
// only\_even([21,15,6,87,97]) -> [6]

// 3. Write a function that takes one argument as a string and it checks if it is a palindrome. Example:

// palindrome( "kayak" ) -> true  
// palindrome("hannah") -> true  
// palindrome("yacht") -> false

# Week 5 | Day 3 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

# 1. given two arrays that contain integers with no duplicates, create a function that determines whether they contain the exact same elements. Example:  
# same\_arr([1, 2, 3], [3, 2, 1]) --> true  
# same\_arr([1, 2, 3], [2, 3, 4]) --> false

# 2. Given an array of integers, return true if the array contains either 3 even or 3 odd values all next to each other.

# same\_three([2, 1, 3, 5]) -> true  
# same\_three([2, 1, 2, 5]) -> false  
# same\_three([2, 4, 2, 5]) -> true

# 3. Return true if the group of N numbers at the start and end of the array are the same. For example, with {5, 6, 45, 99, 13, 5, 6}, the ends are the same for n=0 and n=2, and false for n=1 and n=3.

# same\_ends([5, 6, 45, 99, 13, 5, 6], 1) → false  
# same\_ends([5, 6, 45, 99, 13, 5, 6], 2) → true  
# same\_ends([5, 6, 45, 99, 13, 5, 6], 3) → false

# Week 5 | Day 4 Coding Challenge

**Goal:**

Practice solving debugging problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

// 1. This JavaScript function has syntax errors. Correct them to get the correct output.

function displayEvenNumbers(){ var numbers = [1,2,3,4,5,6,7,8]; var evenNumbers = []; for(var i=0; i<numbers.length-1; i++;){ if(numbers % 2 = 0); { evenNumbers.push(i); } return evenNumbers; } } displayEvenNumbers(); // should return [2,4,6,8]

// 2. This JavaScript function needs to be adjusted to get the desired output.

function loopAndPrint(str){  
 var strToArr = str.split('');  
 strtoArr.foreach(function(i){  
 console.log("This is my element: " + strToArr[i]);  
 console.log("This is my index: " + i);  
 };  
}  
loopAndPrint("This is my String"); // should return  
// This is my element: This  
// This is my index: 0  
// This is my element: is  
// This is my index: 1  
// This is my element: my  
// This is my index: 2  
// This is my element: String  
// This is my index: 3

// 3. This JavaScript class needs some work. See if you can fix it and resolve all errors.

class Person {  
   
 this.firstName = firstName;  
 this.lastName = lastName;  
 this.eyeColor = eyeColor;  
 this.age = age;  
 this.iQ = iQ;  
  
  
 hello: function(){  
 return `Hello my name is ${this.firstname} ${this.lastname}.`  
 };  
   
 divideBy: function(){  
 var divideIt = iQ / age;  
 console.log(`My IQ divided by my age is: ${divideIt}.`)  
 if (divideIt < 3 ) {  
 console.log(`With age comes wisdom.`);  
 else {  
 console.log(`Dilly Dilly!`);  
 }  
 }  
  
var person = new Person('John', 'Smith', 'Brown', 23, 115);  
var person2 = new Person('Bill', 'Jenco', 'Blue', 50, 100);  
  
person.hello();  
person.divideBy();  
person2.hello();  
person2.divideBy();

# Week 6 | Day 1 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

# 1. Given a list of integers,**return an array** where each integer is multiplied with itself.

# square([1, 2, 3]) → [1, 4, 9]  
# square([6, 8, -6, -8, 1]) → [36, 64, 36, 64, 1]

# 2. Given a list of strings, **return a array** where each string is replaced by 3 copies of the string concatenated together.

# copies3(["a", "bb", "ccc"]) → ["aaa", "bbbbbb", "ccccccccc"]  
# copies3(["24", "a", ""]) → ["242424", "aaa", ""]  
# copies3(["hello", "there"]) → ["hellohellohello", "theretherethere"]

# 3. Given a list of strings, **return an array** where each string has "y" added at its start and end.

# moreY(["a", "b", "c"]) → ["yay", "yby", "ycy"]  
# moreY(["hello", "there"]) → ["yhelloy", "ytherey"]  
# moreY(["yay"]) → ["yyayy"]

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# Week 6 | Day 2 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

# 1. Given an array of strings, **return a hash** containing a key for every different string in the array, always with the value 0. For example the string "hello" makes the pair "hello":0. Example:

word0(["a", "b", "a", "b"]) → {"a": 0, "b": 0}  
word0(["a", "b", "a", "c", "b"]) → {"a": 0, "b": 0, "c": 0}  
word0(["c", "b", "a"]) → {"a": 0, "b": 0, "c": 0}

# 2. Modify the hash and return as follows: if the keys "a" and "b" are both in the map and have **equal values**, remove them both.

mapAB2({"a": "aaa", "b": "aaa", "c": "cake"}) → {"c": "cake"}  
mapAB2({"a": "aaa", "b": "bbb"}) → {"a": "aaa", "b": "bbb"}  
mapAB2({"a": "aaa", "b": "bbb", "c": "aaa"}) → {"a": "aaa", "b": "bbb", "c": "aaa"}

# 3. Given an array of strings, **return a hash** with a key for each different string, with the value the number of times that string appears in the array.

wordCount(["a", "b", "a", "c", "b"]) → {"a": 2, "b": 2, "c": 1}  
wordCount(["c", "b", "a"]) → {"a": 1, "b": 1, "c": 1}  
wordCount(["c", "c", "c", "c"]) → {"c": 4}

# Week 6 | Day 3 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

# 1. Given an array of strings, return n array where each string has all its "x" removed.

noX(["ax", "bb", "cx"]) → ["a", "bb", "c"]  
noX(["xxax", "xbxbx", "xxcx"]) → ["a", "bb", "c"]  
noX(["x"]) → [""]

# 2. Given an array of strings, return an array of the strings, omitting any string length 4 or more.

noLong(["this", "not", "too", "long"]) → ["not", "too"]  
noLong(["a", "bbb", "cccc"]) → ["a", "bbb"]  
noLong(["cccc", "cccc", "cccc"]) → []

# 3. Given 3 integer values, a b c, return their sum. **However**, if one of the values is the same as another of the values, it does not count towards the sum.

loneSum(1, 2, 3) → 6  
loneSum(3, 2, 3) → 2  
loneSum(3, 3, 3) → 0

# Week 6 | Day 4 Coding Challenge

**Goal:**

Practice solving Ruby problems.

**Assignment:**

This coding challenge has 3 problems for you to solve.

**Challenges:**

# 1. Given a string, return a string where for every char in the original, there are two chars.

# doubleChar("The") → "TThhee"  
# doubleChar("AAbb") → "AAAAbbbb"  
# doubleChar("Hi-There") → "HHii--TThheerree"

# 2. Given **a string** and **an integer n**, **return a string** made of n repetitions of the last n characters of the string.

repeatEnd("Hello", 3) → "llollollo"  
repeatEnd("Hello", 2) → "lolo"  
repeatEnd("Hello", 1) → "o"

# 3. Given a string, return the length of the largest "block" in the string. A block is a run of adjacent characters that are the same.

maxBlock("hoopla") → 2  
maxBlock("abbCCCddBBBxx") → 3  
maxBlock("") → 0