Week 7 Codify academy

**Week 7**

**In Class Quiz**

1. What is a variable? Explain in your own words.
2. What is an array? Explain in your own words.
3. Explain, in very simple terms, what a ‘for loop’ does.
4. What does console.log() do?

**Group Discussion Questions**

1. What are 3 ways to display JavaScript?
2. What is the difference between alert() and prompt()?
3. What are 4 variable types?
4. What is concatenation and what does it do?
5. What does an if conditional test for?
6. What is an else statement used for?
7. List 8 comparison operators.
8. List 3 logical operators.
9. What is the standard for loop syntax?
10. What is the standard function syntax?

**Exercises**

***Important: Make sure to add comments to your code to help your future self.***

1. Create a copy of your template folder and rename it to week7exercise.
2. Drag this new folder into your 'week7' folder inside your 'codify' folder.
3. For these exercises, before you actually check to see what the outcome is, think it through and then write your answer down as a comment in your code. Then check the code and see if you got it right.
4. If you did get the answer right - great! If not, add some more comments about what DID happen, and how it now makes sense to you.
5. Determine what variable type each one is:
   * var testOne = "What kind of variable is this?";
   * var testTwo = 256;
   * var testThree = ["What", "kind", "of", "variable", "am", "I?"];
   * var testFour = false;
   * var testFive = [1, 2, 5];
   * var testSix = 128;
   * var testSeven = "What am I?"
   * var testEight = true;
   * var testNine = ["What kind of variable is this?", 2, 5, 19];
6. Concatenation (combining things in JavaScript):

Given these variables

var string1 = "Hello ";   
var string2 = "my name is ";   
var string3 = "your name here";   
var combinedStrings = string1 + string2 + string3;

What do you expect the console message to be?

console.log(combinedStrings);

Given these variables

var num1 = 8;   
var num2 = 52;   
var num3 = 60;   
var combinedNumbers = num1 + num2 + num3;

What do you expect the console message to be?

console.log(combinedNumbers);

Given these variables

var mixedNum1 = 10;   
var mixedString1 = "ten";   
var mixedNum2 = "10";   
var mixedConcatenation = mixedNum1 + mixedNum2 + mixedString1;

What do you expect the console message to be?

console.log(mixedConcatenation);

1. If / Else If / Else - Checking for True or False

Given these variables

var num4 = 5;   
var num5 = 0;

What do you expect the console message to be?

if (num4 > 1) {   
console.log("Num4 is greater than 1");   
} else {   
console.log("Num4 is NOT greater than 1");   
};

Given these variables

var num4 = 5;   
var num5 = 0;

What do you expect the console message to be?

if (num4 < num5 || num4 === num5 && true) {   
console.log("If statement ran!");   
} else {   
console.log("Else statement ran");   
};

Given these variables

var num4 = 5;   
var num5 = 0;

What do you expect the console message to be?

if (num4 < num5 || num4 === num5) {   
console.log("If statement ran!");   
} else if (num5 === "0" || true) {   
console.log("Else if statement ran");   
} else {   
console.log("Else statement ran");   
};

Given these variables

var num4 = 5;   
var num5 = 0;

What do you expect the console message to be?

if (num4 > num5 && num4 === num5) {   
console.log("If statement ran!");   
} else if (num5 === "0" || true) {   
console.log("Else if statement ran");   
} else {   
console.log("Else statement ran");   
};

1. For Loop - Looking into Arrays

Given this variable

var array1 = ["this", "is", "an", "array", "of", "strings"];

What do you expect the console message to be?

for (var i = 0; i < array1.length; i = i + 1) {   
console.log(i, array1[i]);   
};

Given these variables

var array2 = [1, 3, 5, 7, 9];   
var total = 0;

What do you expect the console message to be?

for (var i = 0; i < array2.length; i = i + 1) {   
total = total + array2[i];   
};   
console.log(total);

Given this variable

var array3 = [11, 33, 55, 77, 99];

What do you expect the console message to be?

for (var i = 0; i < array2.length; i = i + 1) {   
if(array3[i] >= 55 || array3[i] <= 100){   
console.log(array3, array3[i]);   
};   
};

1. Functions - making things happen

Given this function

function testStuff (a, b) {   
if(a > 25 && b < 100){   
console.log(a + " is greater than 25 and " + b + "is less than 100");   
} else {   
console.log(a + " is NOT greater than 25 or " + b + "is NOT less than 100");   
};   
};

What do you expect the console message to be for each?

testStuff(10, 101);   
testStuff(26, 99);   
testStuff(100, 25);

Given this function

function testStuff2(c, d) {   
if(c == 25){   
console.log(c + " is equal to 25");   
} else if(d <= 100){   
console.log(d + " is less than or equal to 100");   
} else {   
console.log("Neither if or else if statement ran");   
};   
};

What do you expect the console message to be?

testStuff2(26, 101);   
testStuff2(25, 99);   
testStuff2(102, 24);

***Once you have completed these exercises add them to Github.***

[Download Completed Week 7 Exercises](http://codifyacademy.com/wk7/week7exercises.zip)

**Project**

***Important: Make sure to add comments to your code to help your future self.***

This week we will build a website for an individual using Bootstrap. Before starting this project, you will need to decide on what type of individual portfolio you want to build. This is a great time to build a website for a family member or friend. You can use this as a reference and you'll added to your resume as a professional developer! Make sure that whatever you decide to build, you're passionate about it.

**Steps For Making a Portfolio Website**

1. Decide an individual you want to build a website for.
2. List out all the functionality you want to include in the portfolio website. E.X. About me, contact us, services, testimonials, social media, etc.
3. Paper prototype out how the website will look.
4. Google "free bootstrap template", and choose one that looks similar to your paper prototype.
5. Download the template & uncompress(unzip) the folder then start manipulating the template to look like your paper prototype!
6. Make sure to grab content from somewhere, don't spend much time finding/creating content for the website, we just need to make sure it looks good!