



Intro to JavaScript Week 2 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: In VS Code, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your JavaScript project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

1. What do each of the following Boolean expressions evaluate to?

Boolean Expression	Answer
true && false	FALSE
true false	FALSE
false && false	FALSE
true && (false true)	FALSE
false (true && false)	TRUE



<code>false 1 < 5</code>	TRUE
<code>5 >= 4 && 1 > 3</code>	FALSE
<code>10 < 4 1 > 4</code>	FALSE
<code>12 >= 2 && 1 < 24</code>	TRUE
<code>'Hello'.charAt(0) == 'h'</code>	TRUE

2.

2. In your editor, create a new directory for this project. Create an `index.html` and `index.js` file. Link the JavaScript file to the HTML file. In the JavaScript file create the following Boolean variables and choose what values they hold:
 - a. `isHotOutside`
 - b. `isWeekday`
 - c. `hasMoneyInPocket`
3. Create the following variables and assign them values (the assigned values should not be Boolean):
 - a. `costOfMilk`
 - b. `moneyInWallet`
 - c. `thirstLevel` (how thirsty you are on a scale of 1-10)
4. Using the variables you created above and Boolean operators, create variables for the following scenarios:
 - a. `shouldByIcecream` – this should be true if it is hot outside and there is money in your pocket
 - b. `willGoSwimming` – this should be true if it is hot outside and it is not a weekday
 - c. `isAGoodDay` – this should be true if it is hot outside, there is money in your pocket, and it is not a weekday
 - d. `willBuyMilk` – this should be true if it is hot outside, and `thirstLevel` is greater than or equal to 3, and `moneyInWallet` is greater than or equal to 2 times the cost of milk.

Example: If I had the variables `isWeekday` and `isSummer` and I was going to create a variable `isSchoolDay`, I would do something like the following:

```
var isSchoolDay = isWeekday && !isSummer;
```

5. Log the values to the console.
6. Create a new file called `loops.js` and link it to your HTML file. Create the following loops with any variables you feel are needed:
 - a. A while loop that prints all even numbers from 0 to 100
 - b. A while loop that prints every 3rd number going backwards from 100 until we reach 0
 - c. A for loop that prints every other number from 1 to 100



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- d. A for loop that prints every number from 0 to 100, but if the number is divisible by 3, it prints “Hello” instead of the number, and if the number is divisible by 5, it prints “World” instead of the number, and if it is divisible by both 3 and 5, it prints “HelloWorld” instead of the number.

Screenshots of Code:

```
index.html > html
1 <html>
2   <script src="index.js" ></script>
3   <script src="loops.js" ></script>
4 </html>
```

```
JS index.js > ...
1 var isHotOutside = true;
2 var isWeekDay = false;
3 var hasMoneyInPocket = true;
4
5 var costOfMilk = 4;
6 var moneyInWallet = 20;
7 var thirstLevel = 5;
8
9 var shouldBuyIceCream = isHotOutside && hasMoneyInPocket;
10 console.log(shouldBuyIceCream);
11
12 var willGoSwimming = isHotOutside && !isWeekDay;
13 console.log(willGoSwimming);
14
15 var isAGoodDay = isHotOutside && hasMoneyInPocket && !isWeekDay;
16 console.log(isAGoodDay);
17
18 var willBuyMilk = isHotOutside && thirstLevel >= 3 && moneyInWallet >= 4 * 2;
19 console.log(willBuyMilk);
20
21
```

Caption



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```
1  var i = 0;
2  while(i <= 100) {
3      if (i % 2 == 0)
4          console.log(i);
5      i++;
6  }
7
8  var i = 100;
9  while(i > -2) {
10     if (i % 3 == 0)
11         console.log(i);
12     i--;
13 }
14
15 var i;
16 for(i = 0; i <= 100; i += 2) {
17     console.log(i);
18 }
19
20 var i;
21 for(i = 0; i <= 100; i++) {
22     if(i % 3 && 5 == 0) {
23         console.log("Hello")
24     }
25     else if(i % 3 == 0) {
26         console.log("World")
27     }
28     else if(i % 5 == 0) {
29         console.log("HelloWorld")
30     }
31 }
```

Caption

Screenshots of Running Application:

Unable, as my computer won't let me.

URL to GitHub Repository:

<https://github.com/jmosen2/week2>