PROMINEO TECH

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	TRUE
false && false	FALSE

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

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. shouldBuyIcecream – 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:

boolean 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

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:

```
 1   // 2. Boolean Variables
 1 let isHotOutside = true;
 2 let isWeekday = false;
 3 let hasMoneyInPocket = true;
 4
 5 // 3. Number Variables
 6 let costOfMilk = 2;
 7 let moneyInWallet = 10;
 8 let thirstLevel = 5;
 9
10 // 4. Scenario Variables
11 let shouldBuyIcecream = isHotOutside && hasMoneyInPocket;
12 let willGoSwimming = isHotOutside && !isWeekday;
13 let isAGoodDay = isHotOutside && hasMoneyInPocket && !isWeekday;
14 let willBuyMilk = isHotOutside && (thirstLevel >= 3) && (moneyInWallet >= (2 * costOfMilk));
15
16 // 5. Log Values to Console
17 console.log("shouldBuyIcecream is: " + shouldBuyIcecream);
18 console.log("willGoSwimming is: " + willGoSwimming);
19 console.log("isAGoodDay is: " + isAGoodDay);
20 console.log("willBuyMilk is: " + willBuyMilk);
21
22

index.js                                                    1,23         All
"index.js" 23L, 716C written
```

```javascript
// Loops.js

console.log("6a. While loop prints even numbers from 0-100");
let i=0;

while (i <=100){
        console.log(i);
        i +=2;
}

console.log("6b. While loop prints every 3rd number going backward from 100 to 0");

let n = 100;

while (n >= 0){
        console.log(n);
        n -= 3;
}


console.log("6c. A for loops that prints every other number from 1 to 100");

 for(i = 1; i <=100; i+=2){
        console.log(i);
}


console.log("6d. A for loop from 0 to 100, except Hello at nums divisible by 3, World at nums divisible by 5, and HelloWorld and nums divisible by 3 and 5.");

for (i = 0; i <= 100; i++){
        if ((i % 3 == 0) && (i % 5 ==0)){
                console.log('HelloWorld');
        }
        else if (i % 3 == 0){
                console.log('Hello');
        }
        else if (i % 5 == 0){
                console.log('World');
        }
        else {
                console.log(i);
        }
}
```

Screenshots of Running Application:

Console cleared at 11:15:09 AM

shouldBuyIcecream is: true	S Global Code — index.js:18
willGoSwimming is: true	S Global Code — index.js:19
isAGoodDay is: true	S Global Code — index.js:20
willBuyMilk is: true	S Global Code — index.js:21

Console cleared at 11:28:42 AM

6a. While loop prints even numbers from 0-100	S Global Code — loops.js:3
0	S Global Code — loops.js:7
2	S Global Code — loops.js:7
4	S Global Code — loops.js:7
6	S Global Code — loops.js:7
8	S Global Code — loops.js:7
10	S Global Code — loops.js:7
12	S Global Code — loops.js:7
14	S Global Code — loops.js:7
16	S Global Code — loops.js:7
18	S Global Code — loops.js:7
20	S Global Code — loops.js:7
22	S Global Code — loops.js:7
24	S Global Code — loops.js:7
26	S Global Code — loops.js:7
28	S Global Code — loops.js:7
30	S Global Code — loops.js:7
32	S Global Code — loops.js:7
34	S Global Code — loops.js:7
36	S Global Code — loops.js:7
38	S Global Code — loops.js:7
40	S Global Code — loops.js:7
42	S Global Code — loops.js:7
44	S Global Code — loops.js:7
46	S Global Code — loops.js:7
48	S Global Code — loops.js:7
50	S Global Code — loops.js:7
52	S Global Code — loops.js:7
54	S Global Code — loops.js:7
54	S Global Code — loops.js:7
56	S Global Code — loops.js:7
58	S Global Code — loops.js:7
60	S Global Code — loops.js:7
62	S Global Code — loops.js:7
64	S Global Code — loops.js:7
66	S Global Code — loops.js:7
68	S Global Code — loops.js:7
70	S Global Code — loops.js:7
72	S Global Code — loops.js:7
74	S Global Code — loops.js:7
76	S Global Code — loops.js:7
78	S Global Code — loops.js:7
80	S Global Code — loops.js:7
82	S Global Code — loops.js:7
84	S Global Code — loops.js:7
86	S Global Code — loops.js:7
88	S Global Code — loops.js:7
90	S Global Code — loops.js:7
92	S Global Code — loops.js:7
94	S Global Code — loops.js:7
96	S Global Code — loops.js:7
98	S Global Code — loops.js:7
100	S Global Code — loops.js:7
6b. While loop prints every 3rd number going backward from 100 to 0	S Global Code — loops.js:11
100	S Global Code — loops.js:16
97	S Global Code — loops.js:16
94	S Global Code — loops.js:16
91	S Global Code — loops.js:16
88	S Global Code — loops.js:16

88	Global Code — loops.js:16
85	Global Code — loops.js:16
82	Global Code — loops.js:16
79	Global Code — loops.js:16
76	Global Code — loops.js:16
73	Global Code — loops.js:16
70	Global Code — loops.js:16
67	Global Code — loops.js:16
64	Global Code — loops.js:16
61	Global Code — loops.js:16
58	Global Code — loops.js:16
55	Global Code — loops.js:16
52	Global Code — loops.js:16
49	Global Code — loops.js:16
46	Global Code — loops.js:16
43	Global Code — loops.js:16
40	Global Code — loops.js:16
37	Global Code — loops.js:16
34	Global Code — loops.js:16
31	Global Code — loops.js:16
28	Global Code — loops.js:16
25	Global Code — loops.js:16
22	Global Code — loops.js:16
19	Global Code — loops.js:16
16	Global Code — loops.js:16
13	Global Code — loops.js:16
10	Global Code — loops.js:16
7	Global Code — loops.js:16
4	Global Code — loops.js:16
1	Global Code — loops.js:16

6c. A for loops that prints every other number from 1 to 100	Global Code — loops.js:21
1	Global Code — loops.js:24
3	Global Code — loops.js:24
5	Global Code — loops.js:24
7	Global Code — loops.js:24
9	Global Code — loops.js:24
11	Global Code — loops.js:24
13	Global Code — loops.js:24
15	Global Code — loops.js:24
17	Global Code — loops.js:24
19	Global Code — loops.js:24
21	Global Code — loops.js:24
23	Global Code — loops.js:24
25	Global Code — loops.js:24
27	Global Code — loops.js:24
29	Global Code — loops.js:24
31	Global Code — loops.js:24
33	Global Code — loops.js:24
35	Global Code — loops.js:24
37	Global Code — loops.js:24
39	Global Code — loops.js:24
41	Global Code — loops.js:24
43	Global Code — loops.js:24
45	Global Code — loops.js:24
47	Global Code — loops.js:24
49	Global Code — loops.js:24
51	Global Code — loops.js:24
53	Global Code — loops.js:24
55	Global Code — loops.js:24

57	Global Code — loops.js:24	
59	Global Code — loops.js:24	
61	Global Code — loops.js:24	
63	Global Code — loops.js:24	
65	Global Code — loops.js:24	
67	Global Code — loops.js:24	
69	Global Code — loops.js:24	
71	Global Code — loops.js:24	
73	Global Code — loops.js:24	
75	Global Code — loops.js:24	
77	Global Code — loops.js:24	
79	Global Code — loops.js:24	
81	Global Code — loops.js:24	
83	Global Code — loops.js:24	
85	Global Code — loops.js:24	
87	Global Code — loops.js:24	
89	Global Code — loops.js:24	
91	Global Code — loops.js:24	
93	Global Code — loops.js:24	
95	Global Code — loops.js:24	
97	Global Code — loops.js:24	
99	Global Code — loops.js:24	
6d. A for loop from 0 to 100, except Hello at nums divisible by 3, World at nums divisible by 5, and HelloWorld and nums divisible by 3 and 5.	Global Code — loops.js:28	
HelloWorld	Global Code — loops.js:32	
1	Global Code — loops.js:41	
2	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
4	Global Code — loops.js:41	

4	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
7	Global Code — loops.js:41	
8	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
11	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
13	Global Code — loops.js:41	
14	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
16	Global Code — loops.js:41	
17	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
19	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
22	Global Code — loops.js:41	
23	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
26	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
28	Global Code — loops.js:41	
29	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
31	Global Code — loops.js:41	
32	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	

Hello	Global Code — loops.js:35	
34	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
37	Global Code — loops.js:41	
38	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
41	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
43	Global Code — loops.js:41	
44	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
46	Global Code — loops.js:41	
47	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
49	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
52	Global Code — loops.js:41	
53	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
56	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
58	Global Code — loops.js:41	
59	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
61	Global Code — loops.js:41	
62	Global Code — loops.js:41	

62	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
64	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
67	Global Code — loops.js:41	
68	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
71	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
73	Global Code — loops.js:41	
74	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
76	Global Code — loops.js:41	
77	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
79	Global Code — loops.js:41	
World	Global Code — loops.js:38	
Hello	Global Code — loops.js:35	
82	Global Code — loops.js:41	
83	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
World	Global Code — loops.js:38	
86	Global Code — loops.js:41	
Hello	Global Code — loops.js:35	
88	Global Code — loops.js:41	
89	Global Code — loops.js:41	
HelloWorld	Global Code — loops.js:32	
91	Global Code — loops.js:41	

91	S Global Code — loops.js:41
92	S Global Code — loops.js:41
Hello	S Global Code — loops.js:35
94	S Global Code — loops.js:41
World	S Global Code — loops.js:38
Hello	S Global Code — loops.js:35
97	S Global Code — loops.js:41
98	S Global Code — loops.js:41
Hello	S Global Code — loops.js:35
World	S Global Code — loops.js:38

URL to GitHub Repository: https://github.com/blentz100/Week2