



## Intro to JavaScript Week 3 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. Create an array called `ages` that contains the following values: 3, 9, 23, 64, 2, 8, 28, 93.
  - a. Programmatically subtract the value of the first element in the array from the value in the last element of the array (do not use numbers to reference the last element, find it programmatically, `ages[7] - ages[0]` is not allowed). Print the result to the console.



# PROMINEO TECH

- b. Add a new age to your array and repeat the step above to ensure it is dynamic (works for arrays of different lengths).
  - c. Use a loop to iterate through the array and calculate the average age. Print the result to the console.
2. Create an array called names that contains the following values: 'Sam', 'Tommy', 'Tim', 'Sally', 'Buck', 'Bob'.
  - a. Use a loop to iterate through the array and calculate the average number of letters per name. Print the result to the console.
  - b. Use a loop to iterate through the array again and concatenate all the names together, separated by spaces, and print the result to the console.
3. How do you access the last element of any array?
4. How do you access the first element of any array?
5. Create a new array called nameLengths. Write a loop to iterate over the previously created names array and add the length of each name to the nameLengths array.  
For example:

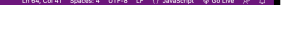
```
namesArray = ["Kelly", "Sam", "Kate"] //given this array
```

```
nameLengths = [5, 3, 4] //create this new array
```

6. Write a loop to iterate over the nameLengths array and calculate the sum of all the elements in the array. Print the result to the console.
7. Write a function that takes two parameters, word and n, as arguments and returns the word concatenated to itself n number of times. (i.e. if I pass in 'Hello' and 3, I would expect the function to return 'HelloHelloHello').
8. Write a function that takes two parameters, firstName and lastName, and returns a full name (the full name should be the first and the last name separated by a space).
9. Write a function that takes an array of numbers and returns true if the sum of all the numbers in the array is greater than 100.
10. Write a function that takes an array of numbers and returns the average of all the elements in the array.



- ### Screenshots of Code:





# PROMINEO TECH

```
Users > hannah > $S codingAssignment.js > ...
65
66 //8:
67 function fullName(firstName, lastName) {
68   return firstName + ' ' + lastName;
69 }
70 console.log(fullName('Amelia', 'Earhart'));
71
72 //9:
73 let sum = 0;
74 let numberArray = [50, 60, 70];
75 function numberSum(arr){
76   for (let i = 0; i < arr.length; i++) {
77     sum += arr[i]
78   }
79   if(sum > 100){
80     return true;
81   } else {return false};
82 }
83 console.log(numberSum(numberArray));
84
85
86 //10:
87 function array(arrayNum){
88   let sum = 0;
89   for (let it = 0; it < arrayNum.length; it++){
90     sum += arrayNum[it];
91   }
92   return sum / arrayNum.length
93 }
94 console.log(array(numberArray));
95
96 // 11:
97 let bagels = [20, 30, 50];
98 let donuts = [5, 10, 15];
99 function whichIsMore(arrayOne, arrayTwo){
100   let total = 0
101   for (let p = 0; p < arrayOne.length; p++) {
102     total += arrayOne[p]
103   }
104   let bagelVariable = total / arrayOne.length;
105
106   let complete = 0
107   for (let p = 0; p < arrayTwo.length; p++) {
108     complete += arrayTwo[p]
109   }
110   let donutVariable = complete / arrayTwo.length;
111   if (bagelVariable > donutVariable) {
112     return true;
113   } else {return false};
114 }
115
116 console.log(whichIsMore(bagels, donuts));
117
118 // 12:
119 function willBuyDrink(isHotOutside, moneyInPocket){
120   if (isHotOutside = true && moneyInPocket >= 10.50){
121     return true;
122   } else{return false};
123 }
124 console.log(willBuyDrink(true, 12));
125
126 // 13: Cat #1 owns the pink bowl, and cat #2 owns the blue bowl.
127 //If cat #2 has more food than cat #1, then we must feed cat #1 or it will w
128 //cat #1, all is fine, do not feed the cats.
129 //If the pink cat food bowl has less than the blue cat food bowl, feed the c
130 //If the pink cat food bowl has the same amount or more of the blue catfood t
131 let pinkBowl = 10
132 let blueBowl = 15
133
134 function feedWhichCat(pinkNumber, blueNumber){
135   if (pinkNumber < blueNumber){
136     return 'Feed cats.';
137   } else {return 'Do not feed the cats.'}
138 }
139
140 console.log(feedWhichCat(blueBowl, pinkBowl));
```

codingBrowser.html | /Users/hannah/codingBrowser.html

Amelia Earhart  
true  
60

codingAssignment.js:70  
codingAssignment.js:83  
codingAssignment.js:94

codingAssignment.js:116  
codingAssignment.js:124  
codingAssignment.js:140

Page layout may be unexpected due to Quirks Mode

**Screenshots of Running Application:**

**-Used a split screen to show both.**

**URL to GitHub Repository:**