Challenge Problems for Level 1

Numbers:

* Add 1 to 3

*Expected Result: 4*

* Multiply 4 by 2

*Expected Result: 8*

* Subtract 12 by 8

*Expected Result: 4*

* Divide 4 by 2

*Expected Result: 2*

* Add 5 and 2.5

*Expected Result: 7.5*

* Subtract 4 by 3.2

*Expected Result: 0.799999999998*

* Multiply 2.5 by 4

*Expected Result: 10*

* Divide 5 by 2

*Expected Result: 2.5*

* Find 5 squared

*Expected Result: 25*

Stings:

* Write and get back the word Hello, not an error message

*Expected Result: Hello*

* Add the words Hello and World

*Expected Result: Hello World*

* Count the number of letters in the phrase -I’m learning to code-

*Expected Result: 20*

* Make the phrase -learning to code is fun- all upper case letters
* Make the same phrase -LEARNING TO CODE IS FUN - above all lower case

Variable Challenges:

* Create a variable called x and set it equal to a number
* Create another variable called y and set it to a number
* Perform basic math operations (addition, subtraction, multiplication, division) on these variables
* Create a variable called name and set it equal to your name. Make thisa variable that can’t be changed

Arrays:

* Create an array of numbers 1 through 10 (Hint: There is no trick.)

*Expected Result:* [1,2,3,4,5,6,7,8,9,10]

* Create an array of animals (Hint: What data type would you use for animals?)

Booleans

* Compare two numbers using> to get True
* Compare two numbers using< to get False
* Compare two numbers using the> to get False
* Compare two numbers using the< to get True
* Compare two numbers using === to get True
* Compare two numbers using === to get False
* Compare two numbers using !== to get True
* Compare two numbers using !== to get False

Object

Bonus Challenges:

Numbers Bonus Challenges:

* Find the remainder of 4 divided by 3

*Expected Result*: 1

* Find the square root of 25

*Expected Result*: 5

* Multiply the sum of 5 and 4 by the result of 8 – 3 to get a final result of 45

String Bonus Challenges:

* Get just the first letter of a word

*Expected Result*: Given the name “Mike”

You would get “M”

* Get the first three letters of a word (Hint: You will need to make the word a variable first.)

*Expected Result*: Given the word “Mike”

You would get “Mike”

* Get the position(index) of the letter c in “I enjoy coding”

*Expected Result*: 8

Array Bonus Challenges:

* Create an array of three names and then add another name to the end of that list
* Create an array of three names and then remove one name from that list
* Create an array of foods and then combine it with a secondarray of foods
* Create an array of elements that include 1,2,3,4,5,6, then change the 1 to a 0
* Reverse the order of a list and store it in a variable
* In a list of 10 names, get the first three