Make sure you have the tutorial open when answering the following questions. All of the questions in this module use the Python Tutorial at:

* <http://www.letslearnpython.com/learn/>

Note: You should use the black area of Repl to try the simple Python expressions listed in the questions below.

**Lesson 8: Lists – A Collection of Objects**

1. What is a list in Python? Explain in words and provide an example.

A list is a collection of data, for example, [“diamond miner”, “Bruh”, “ghdg”]

1. Create a list of your favorite sports teams.
   1. Assign your list to a variable. Called “myTeams”
   2. Use the command print(myTeams) to confirm that your variable and your list are the same.

myTeams = ["Ontario Rappers", "Iron State Miners", "Joe"]

print(myTeams)

1. Add a team to your list using “+”.
   1. Verify that + can be used to add two lists
   2. Write you Python code below

myTeams = ["Ontario Rappers", "Iron State Miners", "Joe"] + ["Other Team"]

print(myTeams)

1. Create a list containing your favorite colour, your favorite number, and the name of someone you know. Show how to write this list in Python code below.

myTeams = ["Magenta", "9", "Neil Narayan"]

1. Do Python lists have to contain elements that are all the same data type? Answer True / False.

False

**Lesson 8: Lists – List Indexes**

1. What is the value of myTeams[0]? (Assuming that you have created a list of your favorite sports teams in the previous questions.)

[Ontario Rappers"]

1. What is the list index of the last team in your list of favorite sports teams? Provide the Python code below.

myTeams = ["Ontario Rappers", "Iron State Miners", "Joe"]

print(myTeams[2])

1. Compare Python lists to Python strings.
   1. How are lists and strings similar?

Lists and strings can both store multiple characters

* 1. How are they different?

Lists can hold strings and integers and other data types whereas strings are just one Data type

1. In the tutorial, why does typing “fruit[3]” produce an error?

Because fruit is only three indexes long and starts at index 0.

**Lesson 10: Loops – Counted Loops**

1. Use a counted loop to print out your list of favorite sports teams. Provide your code below.
   1. What is the function of “in”

The function in is printing the string with the integer given.

1. Compare Counted Loops to Conditional Loops.
   1. How are they similar?

They can both perform an action a certain amount of times.

* 1. How are they different?

The amount is predetermined in a counted loop and figured out by the computer in a conditional loop