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 collection of things.

1. Create a list of your favorite sports teams.
   1. Assign your list to a variable. Called “myTeams”

myTeams=[“Raptors", “Lakers", “Blackhawks"]

* 1. Use the command print(myTeams) to confirm that your variable and your list are the same.

It works.

1. Add a team to your list using “+”.
   1. Verify that + can be used to add two lists

Yes, it can be used.

* 1. Write you Python code below

myTeams=[“Raptors", “Lakers", “Blackhawks"+ “Chelsea”]

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.

myFavourites=[“Blue”, “Five”, “Caleb"]

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.)

Raptors

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

Blackhawks=2

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

They both involve inputting words

* 1. How are they different?

Lists involve a series of words while strings do not.

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

This error occurs because there is no fourth item for the list.

**Lesson 10: Loops – Counted Loops**

1. Use a counted loop to print out your list of favorite sports teams. Provide your code below.

<<<for myNum in [1, 2, 3]

Print(myTeams, myNum)

* 1. What is the function of “in”

The function of in is to tell the system to use numbers in the data.

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

They both count. They count upwards and downwards.

* 1. How are they different?

Counted loops only occur for a certain amount of time while conditional loops continue until the certain condition occurs.