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 in Python is just a collection of things

1. Create a list of your favorite sports teams.

myTeams = (‘toronto raptors’, ‘toronto maple leafs’)

print(myTeams)

1. Add a team to your list using “+”.

x = ['l', 'k']

y = ['j', 'h']

v = x + y

print(v)

['l', 'k', 'j', 'h']

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.

myEverything = ['red', 'royal blue', 'Anser', 'Niyam', 'Damian', 'martini', 3, 7]

1. Do Python lists have to contain elements that are all the same data type? Answer True / False.
   1. 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.)
   1. It is the first element.
2. What is the list index of the last team in your list of favorite sports teams? Provide the Python code below.

myTeams = ('toronto raptors', 'toronto maple leafs')

print(myTeams[1])

toronto maple leafs

1. Compare Python lists to Python strings.
   1. How are lists and strings similar?
      1. List can hold strings and have indexs
   2. How are they different?
      1. List can hold integers
2. In the tutorial, why does typing “fruit[3]” produce an error?

It print an error because

This gives an error because there is no index of 3 in the list fruit

**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”
      1. The in function is saying for every element INSIDE this list. Then you wright your code
2. Compare Counted Loops to Conditional Loops.
   1. How are they similar?
      1. They both loop
   2. How are they different?
      1. The counted loop is the condition and loop while the conditional loop needs a condition