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.

**Like a normal list, it is a collection of lists.**

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

**myTeams = [“Raptors”, “Bulls”, “FaZe Clan”]**

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

**The command worked**

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 = [“Raptors” , “Bulls” , “FaZe Clan”] + [“Argonauts”]**

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.

**myList = [“Red” , 10 , “Sahib”]  
 print(myList)**

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.)

**The value is “Raptors”**

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

**myTeams = [“Raptors” , “Bulls” , “FaZe Clan”]**

**[0] [1] [2]**

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

**Both can be words and numbers**

* 1. How are they different?

**Strings are one word or number, while lists are multiple.**

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

**The list index goes past that, there is nothing that follows under “fruit[3]”**

**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 of “in” is used to connect the loop to the list.**

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

**Both require conditions to be true**

* 1. How are they different?

**Counted Loops require a list and just count from the list, the conditional loop requires**

**more code and is more versatile**