**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/**](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.**

* It’s a collection of things

1. **Create a list of your favorite sports teams.**
   1. **Assign your list to a variable. Called “myTeams”**
      * + MyTeam = [“Raptors”, “Golden state”, “OKC”]
   2. **Use the command print(myTeams) to confirm that your variable and your list are the same.**
      * + type(myTeam)
2. **Add a team to your list using “+”.**
   1. **Verify that + can be used to add two lists**
      * + Yes it can be
   2. **Write you Python code below**
      * + MyTeam = [“Raptors”, “Golden state” + “OKC”]
3. **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.**
   * + - myFavourite = (“Purple”, “One”, “Bob”)
4. **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
2. **What is the list index of the last team in your list of favorite sports teams? Provide the Python code below.**
   * + - OKC
3. **Compare Python lists to Python strings.**
   1. **How are lists and strings similar?**
      * + They both include words
   2. **How are they different?**
      * + Lists refers to a series of words whereas strings refer to one word.
4. **In the tutorial, why does typing “fruit[3]” produce an error?**
   * + - This occurs because there is no fourth item in 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.**
   1. **What is the function of “in”** 
      * + It tells the system to use the numbers within the data.
2. **Compare Counted Loops to Conditional Loops.**
   1. **How are they similar?**
      * + They both repeatedly count upward or downward
   2. **How are they different?**
      * + Counting loops repeat a for a certain time whereas conditional loops keep going until a certain thing occurs (or as long as some condition