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.
   1. A list if a collection of things (Defined names)
2. Create a list of your favorite sports teams.
   1. Assign your list to a variable. Called “myTeams”
      1. myTeam = [“Wub”,”Dub,”Dub”]
   2. Use the command print(myTeams) to confirm that your variable and your list are the same.
      1. Print (myTeam) [‘Wub’, ‘Dub’, ‘Dub’]. They were the same
3. Add a team to your list using “+”.
   1. Verify that + can be used to add two lists
      1. You can add two list together
   2. Write you Python code below
      1. myTeam = [“Wub”,”Dub,”Dub”]
      2. bleh = [“Zub”,”Cub”,”Pub”]
      3. myTeam + bleh
4. 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.
   1. favColor = [“Neon Purple”]
   2. favNumber = [“21”]
   3. person = [“Marcus”]
   4. favColor + favNumber + person
5. Do Python lists have to contain elements that are all the same data type? Answer True / False.
   1. True

**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. 0,1,2
2. What is the list index of the last team in your list of favorite sports teams? Provide the Python code below.
   1. myTeam + bleh
   2. [‘Wub’, ‘Dub’, ‘Dub’, ‘Zub’, ‘Cub’, ‘Pub’]

The list number is 5

1. Compare Python lists to Python strings.
   1. How are lists and strings similar?
      1. They both work with storing data
   2. How are they different?
      1. Lists work with any datatype
      2. Strings work with only hold a set of characters
2. In the tutorial, why does typing “fruit[3]” produce an error?
   1. Because fruit[3] isn’t defined under any index number, since the index numbers on the list only go up to 2.

**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. It tells you the index numbers
2. Compare Counted Loops to Conditional Loops.
   1. How are they similar?
   2. How are they different?
      1. A counted loop will only loop for the number of counts given it to loop.
      2. conditional loop which will loop until a condition is reached