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.
2. Create a list of your favorite sports teams.
   1. Assign your list to a variable. Called “myTeams”
   2. Use the command print(myTeams) to confirm that your variable and your list are the same.

myTeams = ["Eagles", "Blue Jays", "Maple Leafs"]

print(myTeams)

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 = ["Eagles", "Blue Jays", "Maple Leafs"]

team = ["Red Socks"]

print(myTeams + team)

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.

things = ["Blood Red", "101", "Kazumi"]

print(things)

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.): Eagles is the value of 0
2. What is the list index of the last team in your list of favorite sports teams? Provide the Python code below.

myTeams = ["Eagles", "Blue Jays", "Maple Leafs"]

print(myTeams[2])

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

* + 1. Both involve strings
    2. Both can be used in equations
  1. How are they different?

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

The end quotation is behind the bracket

**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”

for myTeams in ["Eagles", "Blue Jays", "Maple Leafs"]:

print("Choosen Team is", myTeams)

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

* + 1. Both loop when conditions are meet
  1. How are they different?
     1. One can loop endlessly and the other can not