Categorize Values

Lab Overview

Python allows you to mix types in a list. In this lab, you will create a list with different types and print the values.

In this lab, you will:

* Use numeric data types
* Use string data types
* Use the list data type
* Use a for loop
* Use the print function

Estimated Completion Time

30 minutes

Exercise 1: Mixed Bag

A Python list allows you to mix types in a list. This isn’t the case with lists in other languages. Let’s explore this capability.

1. In the file tree, click on the **work** folder
2. Click on the file **categorize\_values.py** that has been created for you.
3. Define a list with different types as follows:

myMixedBagList = [45, 290578, 1.02, True, "My dog is on the bed.", "45"]

1. Use a **for** loop statement to traverse the list and print out the type of the data:
2. for item in myMixedBagList:

print("{} is of data type {}".format(item,type(item)))

1. Save the file.
2. To run the program, type the following at the terminal:

python3.6 categorize\_values.py

1. Verify that the script runs correctly and that the output displays as you expect it to.
2. ~ $ python3.6 categorize\_values.py
3. 45 is of data type <class 'int'>
4. 290578 is of data type <class 'int'>
5. 1.02 is of data type <class 'float'>
6. True is of data type <class 'bool'>
7. My dog is on the bed. is of data type <class 'str'>
8. 45 is of data type <class 'str'>

~ $

This exercise reinforced the Python programming concepts covered in labs 1 through 6. Although the code is only a few lines, it is very powerful. Take some time to review it and make sure you understand everything that is going on.

Congratulations, you are now familiar with the list data type and Python’s support for mixing data types in a list declaration.

STOP

You have successfully completed this lab.