**Part 1: write a single python program with Lists**

Create a new Python script using PyScripter that performs the following tasks in this order:

1. Stores five items in a list.

2. Switches the first and last entries in the list.

3. Prints the following using a loop:

List item #1 = {item}

List item #2 = {item}

….

List item #5 = {item}

**Part 2: The del and remove Command and Functions**

Create a new Python script using PyScripter:

The del command is powerful in Python. It can delete variables, objects, list items, among other

things. To delete an item at index 2 from a list, you would enter del myList[2] and Python would

delete that item and resize the list.

GISC 2234 Design and Analysis of GIS Applications

Page 2 of 2

The remove command searches for an item in a list and removes the first matching item from the

list. For example, if myList = [1,2,3,4,3,3] and I issued the command myList.remove(3), the

resulting list would contain [1,2,4,3,3].

Using the del and remove commands, write a Python function that takes three arguments: a list, a

string or number, and the string “index” or “item”. The purpose of the function is to remove an item

from the passed list either by a specified index, or item passed. If the user wishes to remove an

item from the list using an index, the third argument passed will be “index”, if the user wishes to

remove the first item found in the list using the item passed, the second argument will be “{item}”.

For example, to remove the item at index 3 from a list, this would be the command

myFunction(myList,3,”index”)

to remove the item “Joe” from the list, this would be the command myFunction(myList,”Joe”,”item”)

Write code to call the function twice, where the first call removes an item by index, and the second

call removes an item by item.

**Part 3: Reading and Splitting**

Create a new Python script using PyScripter:

The goal here is to convert some input to a useful state and use it. You will read in states.csv, store

each line in a dictionary where the state abbreviation is the key, and the state name is the value, and

then print the state names for Kentucky and Flordia using the dictionary and key.

Rough sketch of program logic:

Read states.csv, sanitize the input, and split

Store key and value in dictionary

print stateDict[“KY”]

print stateDict[“FL”]