### Lab Exercise 8

#### **Focus**

1. Strings and string manipulation

This lab maps to learning objectives 1.1 through 1.6 in Competency Eight: Write a working program that manipulates strings including slicing, searching, splitting, and case conversions.

# Part A: Building upon an Existing Solution

For this portion of the lab, you will reuse the program you wrote in Lab4A (Lab FOUR part A).

That means you will open the lab you wrote in the previous assigLab4A and change it. You should NOT start from scratch. Also, all the requirements/prohibitions from the previous lab MUST also be included /omitted from this lab.

Redesign the solution in the following manner:

- 1. Ask the user for their name and their email address before you display the results of the conversions. (LO 1.1, 1.5)
- 2. When the user enters the email address search the string for the @ symbol. If the symbol is not found, ask the user to re-enter their email address till they get it right. (LO 1.6)
- 3. When you display the conversion output to the user, you must include the user's name in the output. **(LO 1.3, 1.5)**
- 4. Save the program as firstname\_lastname\_Lab8a.py where you will replace firstname and lastname with your actual first and last name.

## Part B: Write Something New!

Write a complete and syntactically correct Python program to solve the following problem:

- 1. Input a date in numeric format from the user e.g. mm/dd/yy. (LO 1.1)
- 2. Examine the month entered by the user. If it is larger than 12 or smaller than 1 issue an error message and ask for input again. (LO 1.2, 1.4)
- Perform similar validation tests for the date and year. Year must be 2013. (Any other year is invalid) In addition, the year must only be two digits long. (LO 1.2, 1.4)
- 4. Once all input has been validated, output the string in long date format. Thus a string that was input as 06/01/15 will be output as June 1, 2015. **(LO 1.3, 1.5)**

Use the IDLE programming environment if you are using Python with IDLE. Some of you may be using Komodo or some other Python IDE. Please save your file as firstname\_lastname\_Lab8b.py where you will replace firstname and lastname with your actual first name and last name. Remember to use the extension .py.

Run and test your program for all conditions. Once you are sure it works you will turn in the items listed in the next section.

### Turn In

All labs will be graded in Blackboard. Once you are done with the lab turn it in to the Lab 8 link. Please read the How To Submit instructions if you have any questions or contact the instructor / academic coach.

For this lab you will turn into Blackboard:

- 1. The Python code file(s) you saved in part A
- 2. The Python code file you saved in part B