CMPS 150 – Lab 4 – Feb 8, 2017

The following is an exercise in Python statements/concepts including input, assignment, output and decision statements. When done, you must upload your completed lab to your TA on Moodle. This exercise will be available online on Moodle if you wish to use it again.

Log in to CMPS Lab

- The machine you are using is running a Linux Operating System.
- Login to the CMPS lab (use sheet provided to you by the instructor & the CMPS 150 TA).

1. Copy/Save the lab source code file for today from the Moodle Lecture Site

Look for the file for today "lab4.py" and save the file to your machine.

2. At the Linux desktop, open a terminal window (i.e., command line window)

Do this by right-clicking on the desktop and selecting "Open Terminal" from the menu.

3. Launch IDLE.

```
idle3.5
```

Or, on the MacMini, login as Guest.
Select "Go" from the menu bar, then "Applications"
Find the Python 3.5 applications, double-click on it, and select "IDLE"

4. Open the source code file just copied to your home directory.

Select "File" from the menu bar, "Open" from the menu, then `lab4.py` from the list of files.

5. Edit the first two lines of the code to have your name/clid/section.)

```
# Author:       Your-Name
# CLID/Section: Your-CLID & section-number go here
```

Now review the code.

The code in this week's lab is intended to ask the user for the length of the sides of a triangle. If the input is valid, compute the perimeter of the triangle (sum of the length of the sides).

The input is valid if the sum of every pair of two edges is greater than the remaining edge.

If the input is invalid, let the user know the lengths are invalid.

6. Save your changes and run your code. ***(you can also simply press F5)***

7. Debug your code.

If you have any errors in your code, the interpreter will produce an error, with a line number, where it detects there is a problem with your code. Return to the editor and correct the error. Run it through the interpreter again (step 6) until it runs with no errors.

8. Testing the Code

Use the following test data to see if your code produces correct output.

```
Enter the triangle sides: 3,4,5
Perimeter = 12
```

Run the Python program again with different input. ***(you can also simply press F5)***

```
Enter the triangle sides: 3,1,1
Invalid lengths!
```

9. Exit Python

Close the Python IDLE editor by clicking the X in the upper right corner (or selecting File/Exit from the menus).
Close the Python IDLE shell by clicking the X in the upper right corner (or typing Ctrl-D).

10. Exit Terminal

Close the terminal window by clicking the X in the upper right corner (or typing Ctrl-D).

11. Upload to Moodle

Get in a browser and login to Moodle.
Instead of going to the Lecture Section, go to YOUR specific Upload section on the Moodle site.
Here you will see the lab for today. Click on the link for Lab #4.
Click to "Add a Submission" and then "Upload a File"
Select to "Choose a File" and go about the process of browsing/finding "lab4.py" on the computer
Select to "Upload this File"

When returned to the Upload screen, MAKE SURE to click on the "Save Changes" button.

You will be returned to the "Lab #4" screen. This time you should see your source code file listed on it.

12. Logout of Moodle

13. Logout of Linux

Logout is found on the System (toolbar at the top) menu.