CMPS 150 – Lab 6 – February 22, 2017

The following is an exercise in using repetition (loop) statements. This exercise will be available online on Moodle if you wish to use it again.

Log in to CMPS Lab

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

   Look for the file for today "lab6.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 `lab6.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
```

There will be two(2) parts to this lab.

For the first part, write the code to ask the user to (repeatedly) enter a positive number. As they enter numbers, determine and print whether the input number is odd or even. Entry of zero or a negative number indicates they are finished entering numbers. NOTE: This will be a sentinel-controlled loop.

For the second part, write the code to display a table similar to the one below of pounds and equivalent kilograms (note, 1 pound is 0.453592 kilograms). NOTE: This will be a count-controlled loop.

```
 Pounds      Kilograms
----------------------
    5          2.27
   10          4.54
   15          6.80
   20          9.07
   25         11.34
  ...          ...
  ...          ...
   95         43.09
  100         45.36
```

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

7. Debug your code (perhaps you can skip this step).

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. Sample Run

```
Enter a num (non-positive to exit): 24
24 is even
Enter a num (non-positive to exit): 47
47 is odd
Enter a num (non-positive to exit): 64
64 is even
Enter a num (non-positive to exit): 12
12 is even
Enter a num (non-positive to exit): -5


Pounds     Kilograms
--------------------
    5         2.27
   10         4.54
   15         6.80
   20         9.07
   25        11.34
  ...         ...
  ...         ...
   95        43.09
  100        45.36
```

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 (the globe icon on the toolbar at the top) and login to Moodle.
Instead of going to the Lecture Section, go to YOUR specific Upload Lab section on the Moodle site.
Here you will see the lab for today. Click on the link for Lab #6 Submission.
Click to "Add a Submission" then "Upload a File"
Select to "Choose a File" and go about the process of browsing/finding "lab6.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 #6 Submission" 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.