CMPS 150 – Lab 11 – April 5, 2017

The following is an exercise in working with Python classes/objects (as well as decisions, loops and functions). When done, be sure your Python source code runs properly and 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

1. ***Copy the lab file for today from the class Moodle site.***

   Look for the file for today "lab11.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, select "Go" from the menu bar, then "Applications" Find the Python 3.5 applications, double-click on it, and select "IDLE"

4. ***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
```

5. You must complete the definition of the class in lab11.py
   You must the complete the initializer. The class name is **Car**.
   The class has two(2) data fields. They are **location** and **symbol**.
   The initializer is passed one(1) parameter named **symbolIn**.
   This parameter is used to initialize the data field **symbol**. The data field **location** is initialized to zero(0).

   Write two(2) other methods for this class – name them GetLocation and GetSymbol. Both of these methods will be passed no parameters, and both methods will return the associated data field.

5. If written correctly, you should be able to run the program. Output will look similar to:
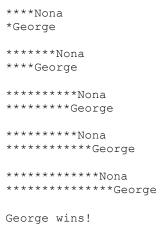
```
**Nona
*******Nona
*********Nona
*************Nona
**************Nona
```

6. Now add code in the main to create a second car (yourCar). Move and display it along with myCar. Output will look similar to:

```
****Nona
*George

*******Nona
****George

*********Nona
*********George

*********Nona
************George

*************Nona
**************George
```

7.   Finally, add code to compare one car's location to the other … to see who wins !!!

```
****Nona
*George

*******Nona
****George

**********Nona
*********George

**********Nona
************George

*************Nona
***************George

George wins!
```

8. 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).
9. Exit Terminal
Close the terminal window by clicking the X in the upper right corner (or typing Ctrl-D).
10. 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 #11.
Click to "Upload a File"
Select to "Choose a File" and go about the process of browsing/finding "lab11.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 #11" 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.