

CMPS 150 – Lab 3 – February 1, 2017

The following is an exercise in using your CMPS Lab Linux account, copying files from the CMPS server, using the IDLE environment to run your Python source code, and finally, uploading 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 “lab3.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 at the back of the lab, login as “Guest”
select “Go” from the menu bar, then “Applications”
Find the Python 3.4 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 `lab3.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 handle two tasks.

First, it is to compute the cost, per square inch, of a circular pizza. Most of the code is missing. Complete the code, remembering that area of a circle is: $\pi * \text{radius} * \text{radius}$, or $\pi * \text{radius} ** 2$, and that in order to use the “built-in” value for π , you must import the math library.

Next, your code must ask for a character string of length 3 (using only one input statement) and print the ascii code (number) for each character in the word. Again, most of the code is missing.

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 radius of pizza: 16
Enter pizza price: 24.99
Price per square inch = $ 0.03
```

```
Enter a 3-letter word: bat
b = 98
a = 97
t = 116
```

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 section on the Moodle site.
Here you will see the lab for today. Click on the link for Lab #3 Submission.
Click to “Add a Submission” and then “Upload a File”
Select to “Choose a File” and go about the process of browsing/finding “lab3.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 #3” 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.