

## ITEC 109 Lab 01

Lab is due by Friday by 5pm. late Lab assignment will be given a 0. In doing this lab assignment, remember to abide by the RU Honor Code. You are to work alone and cite all of your work. **MUST Submit a Py file !**

You must submit the .py file containing your program to D2L. If your submitted file does not compile, it will receive a 0.

**Be sure to sketch out your logic on paper before coding !**

### **Task 1: Get environment ready to Rock and Roll ( Windows 7/8/10 OS)**

It is the knowledge, one who seeks in programming, to become a proficient programmer.

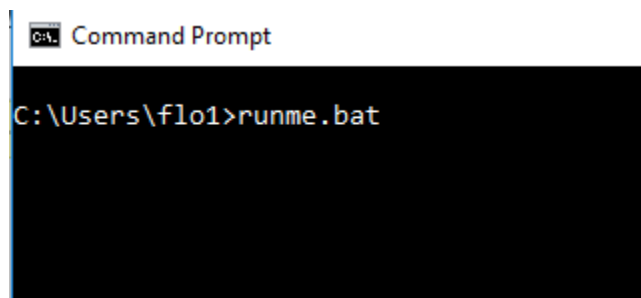
In order to use the python programming language to develop software we would need the following items:

- <https://www.python.org/downloads/release/python-2716/>
- <https://notepad-plus-plus.org/download/v7.7.1.html>

We will be using python 2.7.x version instead of 3.5.x due to certain functions in newer Python 3.7.x differed from 2.7.x software.

Finally, you would need to be comfortable in using DOS prompt, code needed to be developed in a text editor environment. To satisfy this requirement, we must create a file called "c:\users\YOURHOMELLOCATION\runme.bat". In this file, we would need to add the following lines.

```
set PF32="c:\Program Files (x86)"
set PF64="C:\Program Files"
set PATH=%PATH%;"C:\Python27"
```



## Task 2: Writing your first program

Your second task is to create a folder in your laptop/desktop on your C:\users\YOURHOMELOCATION\ITEC109\ . With each lab or homework assignment we will work towards, we can create additional folders under this initial main ITEC109 directory.

Example:

Lab01

C:\users\YOURHOMELOCATION\ITEC109\Lab01

.....

HW01

C:\users\YOURHOMELOCATION\ITEC109\HW01

.....

Now, we have done this and installed python software as well as your text editor called notepad++. We can fire up a notepad++ software and type your first program in this editor. Before programming, it is good practice to draw out some simple pseudo-code to see how one needs to start programming and decide upon how to structure the code before writing actual code.

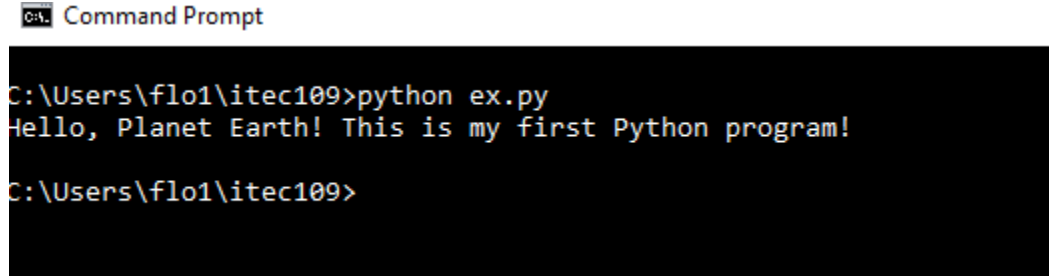
Part 1: Need some header info

```
#
# Author      : freeman
# Date       : 2018.10.29
# Version    : 0.0.1
# Email      : flo@radford.edu
# Assignment : Lab01
# Description :
#            :
#####
```

Code:

```
print "Hello, Planet !, This is my first Python program!"
```

To Run:



```
C:\Users\flo1\itec109>python ex.py
Hello, Planet Earth! This is my first Python program!

C:\Users\flo1\itec109>
```

*Fun fact: You should never copy and paste code from a PDF or word document. One of the reasons is that characters are encoded differently, therefore one must never copy code directly from PDF file to your text editor.*

### Task 3: Variables

- 1) Create a program that prints the message “Hello YOURNAME, Welcome to ITEC 109”.
- 2) In the same program, save the month and the year of your first time driving a vehicle on the road or the last time you’ve driven a vehicle on the streets, also, use a variable to hold the brand of your vehicle you’ve used.
- 3) Finally, use two new variables to save your firstname and lastname onto each of the variables.
- 4) Print out each individual variables that holds a value in item 1 to 3.

### Task 4: Simple Math

In the same program as above make some comments separating the last section from this section. Use one variable to hold each individual numeric value and solve the following math equations and don’t forget to save the result to a variable and print it out.

- 1)  $23 + 9$
- 2)  $8 - 10589$
- 3)  $56.56 * 10$
- 4)  $8 / 3$      # something wrong with this one
- 5)  $9 \% 2$      # there is something unique about this particular problem

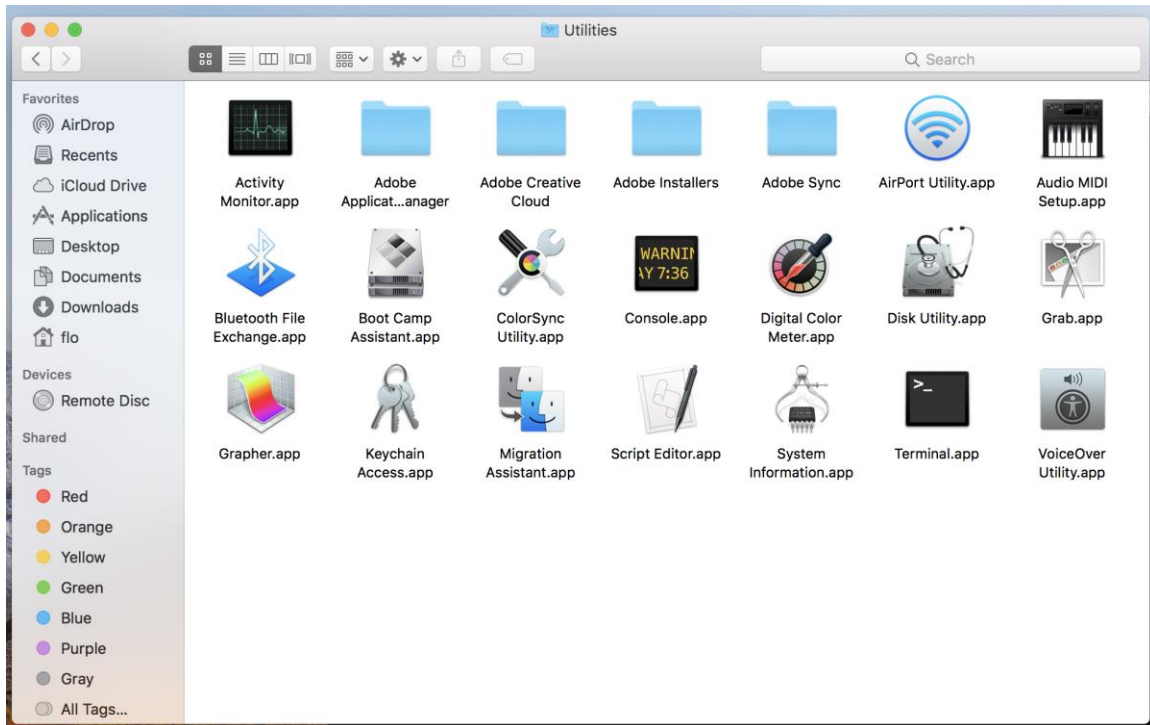
## **Apple : Get environment ready to Rock and Roll ( Sierra / High Sierra / Mojave OS)**

default Terminal aka Shell

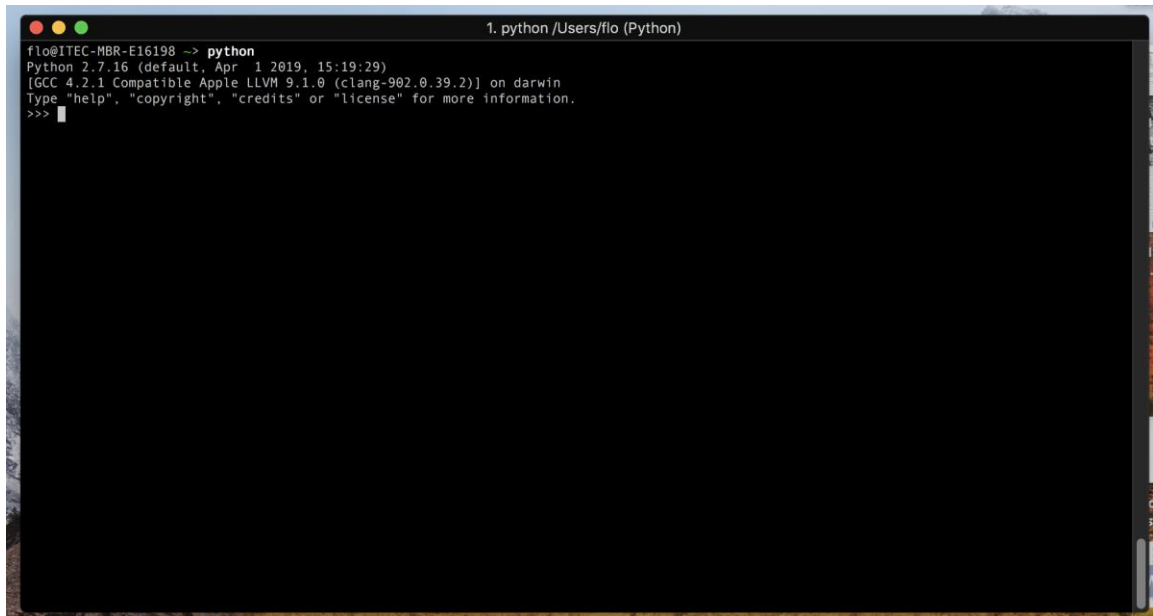
Click FINDER -> APPLICATIONS -> Utilities -> Terminal

### Third-Party Shell

There is also an alternative terminal called [iTerm2](#) v3.3, where you have to download the DMG file from the website in order to use this Terminal.



Once you have clicked on this terminal icon, it should be something like this when this application has popped up.



```
flo@ITEC-MBR-E16198 ~-> python
Python 2.7.16 (default, Apr 1 2019, 15:19:29)
[GCC 4.2.1 Compatible Apple LLVM 9.1.0 (clang-902.0.39.2)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> 
```