Running Python 2.5 on PCs (BRB 4th Floor Lab) Big Data Module

Login Review:

- (1) Press <Ctrl>+<Alt>+ to bring up login prompt
- (2) Type in your UT EID and password
- (3) Select 'Austin' as the network (if the option appears)

Quick review on how to download files needed for the lab

- (1) Open a browser such as Internet Explorer or Mozilla Firefox.
- (2) Go to the class website at http://laits.utexas.edu/compeco/Courses/index392.html
- (3) Find the lab of interest (organized by date) in the program archive table on the website. The third column contains the necessary Duali files, and have file extension ".py"
- (4) Download the files in the code column by right-clicking on the file name and choosing "Save Link As..." (Firefox) or "Save Target As..." (Internet Explorer). Left-clicking on the code links will open the text in the browser, but will not download the file. Make sure to note where you saved the file (e.g. Desktop, My Documents, etc.).

Running Python on PCs

- (1) To open Python go to the Start Menu \rightarrow Programs and choose Python \rightarrow IDLE
- (2) To open a script/function in IDLE, File → Open, then navigate to the python file you wish to edit with IDLE
- (3) To run a script/function after opening, use F5 or click Run → Run Module in the script editor screen

Ending a Session

- (1) Click on the <START> button on the bottom leftmost portion of the screen
- (2) Click "Logout"
- (3) NOTE: be sure to remove any CDs before logging out, and be sure to take any removable media (e.g. thumb drives) with you.

Very Important Notes

(1) The "localFile" variable of the bigdatapython.py script requires you to have permission to write to the C: drive. If you are running this on a computer with Python but where you do not have proper permissions (e.g. vDesk), you can modify this line to a more appropriate folder. For example, if I wanted to write the pdf files to the Desktop, and my EID were Eduardo12, then I would replace

```
localFile = open('c:\\'+str(qq+1)+'.pdf','w')
```

with

 $localFile = open('c::\Users:\Eduardo12:\Ed$

(2) This module does not focus on any specific economic model or analysis, but rather on automating data collection. If you would like more information on big data, how big data analysis works, or places to learn more concerning big data, speak with Dr. Kendrick. If you would like more information on Python or other technologies often used with big data, see Tom.

Alternatively, if you would like to rewrite into Python some of the models previous worked through in class, feel free to talk to Tom about implementation

(3) For pythonanimate.py or fredapiaccess.py to work, you must use the Canopy distribution. In addition, the fredapiaccess.py program has instructions on installing an additional library.

Installing Python on your own machine

- (1) Download the appropriate file from <u>http://www.python.org/getit/</u> (If you do not know if your machine is 32 or 64 bit, download the 32 bit).
- (2) Double click and install
- (3) Recommended: Do not download Python 3.3.0 for the lab. There are substantial differences between this (new) Python implementation and standard implementations (Python 2.7.3).
- (4) For help learning Python syntax for scientific computing, see <u>http://johnstachurski.net/lectures/index.html</u>
- (5) Most Linux distributions come with Python preinstalled.
- (6) You can edit python code either in IDLE (the provided interpreter, similar in spirit to GAMS integrated development environment) or in a text editor (like Notepad++). Save your file as a .py file, and you should get syntax highlighting and other nicities.
- (7) **RECOMMENDED:** For the Enthought Canopy program, which comes with all the scientific computing libraries, visit <u>https://www.enthought.com/products/canopy/</u> This is a quick and easy way to install all the libraries one may need when working in a computer lab, for example.