**Lesson 1: Installing Python and PyScripter**

In this lesson, you will install two programs so you can start writing and running your own Python programs. The first program is the Python language interpreter. We will install the latest version of Python Version 3 (Python 3 for short). The second program is an editor within which you can do all your program writing, running, and editing. It is called PyScripter. Both these programs are **open source software**, which means they are free for you to install and utilize for your personal use. I have put a link to both these programs on our schedule on the class web site. Below are step-by-step instructions for installing both programs. **Important Note: When downloading Python and PyScripter from the web site you must know whether you are using a 32 bit Windows PC or 64 –bit Windows PC. For aMac, see me for additional references.**

If you’d like (this is optional) you can watch a video demonstrating these activities at [http://www.youtube.com/watch?v=1HZ38RzykuE](http://www.youtube.com/watch?v=1HZ38RzykuE%20)

**Installing Python 3**

Here are the step-by-step instructions for installing Python 3.

1. Download the appropriate version of Python (32-bit or 64-bit) from the class web site
2. Once downloaded double click on the program. If you get a warning regarding the security of the program, disregard it.
3. You will then get a window asking if you wish to Run, Save, or Cancel, choose **Run** (ignore the security warning in the that window, the Python site is safe to use)
4. Once the download finishes, you may get another window asking if you want to run the installer. If you do not get such a window go to the next step. If you do get this window, confirm that you want to run the installer by clicking the **Run** button in the resulting window (again ignore the security alert)
5. You will then be in the Python installer and setup program. Follow the process (use the defaults, so no need to change anything), clicking the **Next** button each time. If you are asked at some point whether you wish to allow the installation, respond Yes.
6. Eventually you will reach a window containing a **Finish** button which you should click to complete the installation of Python 3.
7. Now that you have installed Python, move to the next section to download and install PyScripter.

**Installing PyScripter**

Here are the step-by-step instructions for installing the PyScripter Editor (also called an Integrated Development Environment or IDE).

1. Download the appropriate version of PyScripter (32-bit or 64-bit) from the class web site
2. Once downloaded double click on the program. If you get a warning regarding the security of the program, disregard it.
3. You will then get a window asking if you wish to Run, Save, or Cancel, choose **Run** (ignore any security warning in that window)
4. A window will then open showing the progress of downloading the PyScripter software. This will finish quickly because this is a small file.
5. Once the download finishes, you may get another window asking if you want to run the installer. If you do not get such a window go to the next step. If you do get this window, confirm that you want to run the installer by clicking the **Run** button in the resulting window (again ignore the security alert).
6. You will then be in the PyScripter installer and setup program. Follow the process (use the defaults, so no need to change anything), clicking the **Next** button each time. In one window you will be given the chance to select **Create a desktop icon**. Click the box beside this choice. This will place a convenient desktop icon which you can use to launch PyScripter.
7. Eventually you will reach a window containing a **Finish** button which you should click to complete the installation of PyScripter. You may be informed that your security software has blocked certain features of Python from being installed and given the opportunity to over-ride this. Choose **Cancel** to leave this block in place – the blocked features will not impact our use of Python.
8. Python will open automatically. If you choose, you can use the instructions in the following section to enter a simple Python program, run it, then save it. Note that this step is just for fun, so if it doesn’t seem to work, don’t worry about it – we’ll do this exercise and other examples in class.

**Your First Python Program (OPTIONAL EXERCISE)**

You should see three different work areas in the overall PyScripter window. Your program will be entered in the area at the upper right. When you run the program the results will show up in the lower area that runs across the entire PyScripter window. The upper left area is for managing storing and opening of your Python files (we won’t use it at all in this exercise).

1. Use your mouse to select all the green text (between and including the dotted lines across the area. Once this is selected, press the **Backspace** key to delete his text. These are comments and we’ll see their use later, but for now, we’ll just get them out of the way.
2. Now select the word **pass** in the same area (be sure not to select any of the indented space, just the word **pass** by itself). Now type in its place (do this by typing while the word **pass** is selected) the following text. When you enter the text make sure it matches exactly what is shown when you finish. Notice that the editor will “help” you by automatically supplying the closing parenthesis as well as the closing single quote mark.

 print(‘I have now installed Python and run a Python program!’)

1. Click on the small green “run” arrow in the tool bar to run the program. Look in the lower area of the window now to see the results. You should see the following at the bottom of that area :

>>>

I have now installed Python and run a Python program!

>>>

1. Now click anywhere in the editor area (upper right area) of the window.
2. Access the File menu in the upper left of the window and do a **Save As** command to save your new program by the name *Example1.py* on your desktop.
3. Finish up by closing the PyScripter window.