Getting Started with Python Programming for Windows Users

Installation of Python

- Download the current production version of Python (2.7.1) from the <u>Python Download</u> site.
- Double click on the icon of the file that you just downloaded.
- Accept the default options given to you until you get to the Finish button. Your installation is complete.

Setting up the Environment

- Starting at *My Computer* go to the following directory C:\Python27. In that folder you should see all the Python files.
- Copy that address starting with C: and ending with 27 and close that window.
- Click on Start. Right Click on My Computer.
- Click on Properties. Click on Advanced System Settings or Advanced.
- Click on Environment Variables.
- Under System Variables search for the variable Path.
- Select *Path* by clicking on it. Click on *Edit*.
- Scroll all the way to the right of the field called *Variable value* using the right arrow.
- Add a semi-colon (;) to the end and paste the path (to the Python folder) that you previously copied. Click *OK*.

Writing Your First Python Program

- Create a folder called *PythonPrograms* on your *C*:\ drive. You will be storing all your Python programs in this folder.
- Go to Start and either type Run in the Start Search box at the bootom or click on Run.
- Type in *notepad* in the field called *Open*.
- In *Notepad* type in the following program exactly as written:

```
# File: Hello.py
print "Hello World!"
```

- Go to File and click on Save as.
- In the field *Save in* browse for the *C*: drive and then select the folder *PythonPrograms*.
- For the field *File name* remove everything that is there and type in *Hello.py*.
- In the field Save as type select All Files
- Click on Save. You have just created your first Python program.

Running Your First Program

- Go to *Start* and click on *Run*.
- Type *cmd* in the *Open* field and click OK.
- A dark window will appear. Type cd C:\ and hit the key Enter.
- If you type *dir* you will get a listing of all folders in your *C*: drive. You should see the folder *PythonPrograms* that you created.
- Type cd PythonPrograms and hit Enter. It should take you to the PythonPrograms folder.
- Type *dir* and you should see the file *Hello.py*.
- To run the program, type *python Hello.py* and hit Enter.

- You should see the line Hello World!
- Congratulations, you have run your first Python program.

Getting Started with Python Programming for Mac Users

Python comes bundled with Mac OS X. But the version that you have is quite likely an older version. <u>Download</u> the latest binary version of Python that runs on both Power PC and Intel systems and install it on your system.

Writing Your First Python Program

- Click on File and then New Finder Window.
- Click on *Documents*.
- Click on File and then New Folder.
- Call the folder *PythonPrograms*. You will be storing all class related programs there.
- Click on *Applications* and then *TextEdit*.
- Click on TextEdit on the menu bar and select Preferences.
- Select *Plain Text*.
- In the empty TextEdit window type in the following program, exactly as given:

```
# File: Hello.py
print "Hello World!"
```

- From the *File* menu in TextEdit click on *Save As*.
- In the field *Save As:* type *Hello.py*.
- Select *Documents* and the file folder *PythonPrograms*.
- Click Save.

Running Your First Program

- Select *Applications*, then *Utilities* and *Terminal*.
- In your *Terminal* window type *ls* and Return. It should give a listing of all the top level folders. You should see the *Documents* folder.
- Type *cd Documents* and hit Return.
- Type *ls* and hit Return and you should see the folder *PythonPrograms*.
- Type cd PythonPrograms and hit Return.
- Type *ls* and hit return and you should see the file *Hello.py*.
- To run the program, type python Hello.py and hit Return.
- You should see the line *Hello World!*
- Congratulations, you have run your first Python program.

Starting IDLE on Mac

- In a *Terminal* window, type *python*. This will start the Python shell. The prompt for that is >>>
- At the Python shell prompt type *import idlelib.idle*
- This will start the IDLE IDE

Using IDLE on either Windows or Mac

- Start IDLE
- Go to File menu and click on New Window

- Type your program in
- Go to File menu and click on Save. Type in *filename.py* This will save it as a plain text file, which can be opened in in any editor you choose (like Notepad or TextEdit).
- To run your program go to Run and click Run Module