How to write Hello World in Python from the command line on a Mac

Materials Needed: A Macintosh (Mac) Computer, 15-30 minutes

A Hello World program is a simple program that is usually a beginners first program. A Hello World program simply outputs “Hello World”. In this example, we are going to use the programming language Python. Python is a good language to start out with because it has a very simple syntax allowing you to concentrate on programing concepts rather than syntax if you choose to continue learning Python. Learning Python is an important skill because learning how to program will teach good problem solving skills.

Learning how to program is a skill that is becoming more and more useful. Aside from teaching better problem solving skills and breaking down problems, programming is becoming a basic part of education. In the coming years, programming will become a crucial part of K-12 education, just like Math, English, Social Studies and Science is today. I am currently a sophomore at Drexel majoring in Computer Science, and I have been writing Hello World programs and programming since I was a freshman in high school.

1. Open a new terminal. A terminal is an interface in which text based commands can be executed. I am using iTerm for this example, but all macs come with Terminal, which can also be used. If you prefer, you can download iTerm for free on the App Store.
2. Navigate to where you want your file to be saved. In my example I want it to be stored in Documents/COM 310. To navigate, use the cd command and insert a / after each directory. You can also save it in the default location, which is your home directory. Note if there is a space in the name, you must insert a “\” in front of the space.

3. To make a Python file named Hello World, type the command `vim helloWorld.py` you do not want spaces in the file name, you also want the name to start with a lowercase letter, and every word after the first to be capitalized. This is called camel case. Vim is the name of the text editor we are going to use.

4. To be able to write in vim, press “i” on the keyboard

5. The file needs to start with the shebang, which means the script can be invoked directly. The shebang is the first line of the program. This tells the computer that you are using Python to write Hello World. This is the shebang:
#!/usr/bin/env python

6. On the second line, write print “Hello World” Python is space sensitive, so make sure this is against the left hand margin and is not tabbed or spaced in.

    #!/usr/bin/env python
    print "Hello World"

The Hello World program

7. Now, exit vim by pressing “:x”, this saves the file and exits.

8. To run your file on the command line, type python helloWorld.py and press enter!

    python helloWorld.py
    Hello World

The line to run the program, and the program output