Computer Science — Python — HW #1

Assigned on Mon, 2017-01-23. Complete by Tue, 2017-01-31.

The current means of turning in assignments is to email them to [jay.coskey@xxxx.xxx](mailto:jay.coskey@xxxx.xxx).

1. **[Turn in]** Send me an email at [jay.coskey@xxxx.xxxx](mailto:jay.coskey@xxxx.xxxx), with the phrase “HW #1” somewhere in the Subject. Briefly describe any programming experience you might have, and any concerns you might have about the course.

For example:

Yo! This is Al O’Vera. I’ve written a few small programs in Scratch, but nothing in Python. I once looked into writing apps for Android, but it looked like it would take forever, and didn’t have time for it.

**Note:** We might shift to your submitting homework by uploading it to xxxx.xxx. Or we might not.

You do not need to submit any evidence of having completed the remaining items from this assignment.

1. Install and test the Python distribution called “Anaconda”. This has Python itself, plus some additional packages.
   1. In a web browser, visit <https://www.continuum.io/downloads>, and install Anaconda from one of the links.
   2. Next, open a Windows command window by pressing the Windows key then typing “cmd” + <Enter>.
      * On Mac OS X, you would instead open a terminal windows under /Applications/Utilities.
   3. Next run the command

python --version # Note: There are two hyphens before the word “version”.

# The version of Python should start with 3.

* 1. Next, run the command “ipython”. You should get a prompt that reads “In [1]:”.
  2. Test the installation by entering the following command at the prompt.

In [1]: print(‘Hello, world!’)

Starting to learn a new programming language by running some sort of “Hello, world!” program dates back at least as far as 1972. That’s one long-running meme!

1. Download the book Think Python, Second Edition, from <http://greenteapress.com/wp/think-python-2e/>
2. Play lightbot at lightbot.com, up through level 1-8.
   1. First watch the brief video at lightbot.com.
   2. Next, click on the Demo Puzzles button labeled “Web”. This requires Adobe Flash to run, and might take a minute or so to start up.
   3. In the Flash program, click on the screen with the heading “1. Basics”.
   4. Complete all eight Basics boards. The goal is to light up \*all\* the blue squares. Note that you can turn off the music by clicking on the speaker icon on the left.