Homework 1, Bash scripting, intro to Python

In this assignment gives you will learn to write a simple bash script

To do before Thursday, 1 September (class 4)

Readings

1. Read about markdown in git: https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet
2. Work through https://docs.python.org/3.5/tutorial/interpreter.html, chapters 1–3

To do ASAP, no later than Tuesday, 13 September (class 5)

But note that other homework are coming!

Readings

1. Work through book, chapter 3, except pages 58—66 and 72—74
2. Work through book, appendix, pages 394—405
3. Go through grep tutorial: http://www.thegeekstuff.com/2009/03/15-practical-unix-grep-command-examples

Practice Unix Commands and bash scripting

1. Create a repository on your computer to mirror the private one I invited you to. This is where you will submit homework. I recommend not putting this in your CompSkills_F16 directory (since putting a repo in a repo can cause confusion). Something like ~/CompSkillsHomework would make sense, but this is entirely up to you. I will refer to this directory as *<yourHomework>*.

2. Add an appropriate README.md to this directory

3. Write a bash script named *<yourHomework>*/HW1/about-sequences that does the following:

   a. Outputs the text "*<yourName>*, summary of about-sequences"

   b. Outputs the full file information (from ls -l) about ~/CompSkills_F16/Homework/Resources. (or whatever you called the directory in the class repo that contains stuff related to homework.)

   c. Outputs the text "Number of sequences: "

   d. Uses grep and wc to output the number of fasta records in ~/CompSkills_F16/Homework/Resources/HW1-sequences.fsa (remember, fasta records begin with '>')

e. Outputs the last 12 lines of ~/CompSkills_F16/Homework/Resources/HW1-sequences.fsa

4. Make this script executable, and run it, redirecting the output into the file <*yourHomework*>/HW1/script-output.txt.

Turn in homework

1. Commit your work
2. Update your local master
3. Sync with the remote master (that is how we will turn in homework!).

Grading

We will grade your homework by checking script-output.txt for accuracy.