

# 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 before Tuesday, 6 September (class 5)

### Readings

1. Work through book, chapter 3, except pages 58—66 and 72—74
2. Work through book, appendix, pages 394—405

### 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.