

Homework 1: Introduction to the Shell

Due: Feb 1, 2016 by the beginning of class.

You can use whatever shell/OS you like, but I will assume you have access to a modern GNU userland/flags, and your work will be graded accordingly. As such, you are strongly encouraged to use your Ubuntu VM or Newton.

1. (10 pts) Explain briefly in words what the command `ls` does if you enter it into the terminal? What about `# ls` (include the leading `#` symbol)? Briefly, explain the difference.
2. (10 pts) For each of the following, determine if there is a difference between the pairs of commands. If there is a difference, briefly explain why (if there is none, simply say so).
 - a. `ls -ahl` and `ls -lah`
 - b. `ls -ahl` and `ls -a -h -l`
 - c. `ls -si` and `ls --si`
3. (10 pts) Briefly, in words, what does the following command do?

```
grep -iR "foo" *
```

4. (10 pts) Produce valid syntax for a command that takes the list of the first 5 files in your home directory in long listing format and writes this to a new file (overwriting if necessary) called `first5.txt`. (Hint: `ls`, `head`, redirection+pipes. `man` is your friend).
5. (10 pts) Using the `date` command, give valid syntax to display the alphabetic time zone abbreviation (currently “EST”).