Unix Homework 3

CS 6014 Introduction to Computation as a Research Tool

January 2013 Due: 6 Feb. 2013

<u>Information for Submission Requirements</u>:

For this assignment, the commands and results for tasks #2 - 5 (below) will be typed or pasted into your Collab text box.

Background:

For this assignment, you will need to understand the following Unix commands/symbols:

- grep (See Unix Tutorial Two)
- wc (See Unix Tutorial Two)
- > (See Redirecting the Output under Unix Tutorial Three)
- | (See Pipes under Unix Tutorial Three)

Plus, you will learn about the command, *whois*, which can retrieve information from the UVa public database. For details about the whois command, log onto fir, bring up a terminal window, and type:

whois help

Note: If this command does not work well in your account, use the full path to whois:

/uva/bin/whois help

Tasks:

Our UVa IDs are a combination of letters and numbers (e.g., mst3k). Everyone's ID has two or three letters before the first number (e.g., mst would be the first letters in mst3k).

For this assignment task, you will use the first letters in your UVa ID, unless instructed otherwise.

1. Use the *whois* command to see how many people at UVa have the same first letters in their ID. (Hint: use the –a option.) Note: If no one has the same first letters as you, use one of our IDs for the rest of this assignment: jmh, kah, or teh.

- 2. Modify the command in task 1 to redirect the results to a file called *names.txt*. Type or paste the command that you used for this step into your Collab text box.
- 3. Going back to the command that you used in task 1, use the pipe (|) symbol to direct the results of the *whois* command into a *grep* command that searches for the word *staff* in the results. (Hint: use the –i option to ignore case.) Type or paste the command that you used for this step into your Collab text box.
- 4. Adding to the command that you used in task 3, use the pipe symbol a second time to direct the results of the grep command into a word count command so that you can count the number of lines that have the word *staff* in it. Type or paste this command and your results into your Collab text box.
- 5. There are a large number of people at UVa who have a name starting with *Smith*. Using a single line of chained Unix commands, determine how many of the Smiths are at the college at Wise. Type or paste your command and the results into your Collab text box.

Note: You are on your honor to do your own work on this assignment.