CST 334 (Operating Systems)

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# Lab: Pipes and redirection

1. Log in to mlc104.
2. From your home directory, do an 'ls' on my home directory (/home/CLASSES/brunsglenn)
3. Repeat the previous step, but now redirect the output to file 'ls-out.txt'.
4. Do you see any difference between what you got with 'ls' and the contents of 'ls-out.txt'?
5. How many files are in my home directory? Use ls, wc, and pipes to get the number of files.
6. Do an 'ls' on my home directory, pipe the result to sort to do a reverse sort on the file names, then direct the output to file ls-reverse.txt.
7. Do an 'ls -l' on my home directory and redirect the output to ls-long.txt. Take a look at the output.
8. Do an 'ls -l' on my home directory again, but this time pipe the result to sort, and sort on the file size, and then redirect to ls-sorted.txt.
9. Repeat the previous step, but now use pipes and another command to show the 5 biggest files only.
10. How many users under /home/CLASSES? (In other words, how many subdirectories under /home/CLASSES?)
11. We haven't covered awk yet in class, but try this:

$ ls -l | awk '{ print $2}'

What is it doing?

1. Using the idea of the previous problem, how many different months are found in the last modification date of files in my home directory? (ls -l shows last modification date; you may also need uniq and sort)
2. If you still have time, try problem 11 again, but this time using awk '{ print $5, $9 }'.
3. If you still have time, try variations of problem 13.
4. If you still have time, please read the bash man page. Seriously, it's great to read it.