CSCD 240
Lab 2

NOTE: Capture means copy and paste from a command line into a text editor. "Capture command xyz" means to capture the xyz command AND its resulting output. If the question does not say capture still capture all the commands. You must complete this lab via ssh into cslinux.eastern.ewu.edu

1. Capture the results of the uname –a command.

2. Clearly explain why programs should be placed in /bin or /usr/bin.

3. You are asked to use a program named mystery which you have never used before. Explain how you would find information on the program and what it does. List all the ways (Google/Bing is not an option)

4. There are many other environment variables available to the user. Capture the printenv command. Describe 3 of the environment variables.

5. In class we discussed the use of the accent (back tick) for when it comes to executing the date command. Can you use the accent on the ls command? How would you use the accent on the ls command? Capture the usage of the accent on the ls command.

6. Capture the output of the file command on the chmod executable. (Where does chmod live?) Explain the information being displayed.

7. Capture the output of the stat command on the chmod executable. Explain the information being displayed.

8. Try and delete chmod. Did it delete why or why not?

9. Try and delete chmod and capture the output from standard error to a file named err.txt

10. Capture the command to create test1, test2, test3, test33, stu1, stu2, stu22.

11. Using meta characters and a single ls command list all files named test.

12. Using meta characters and a single ls command list only the files with the number 2 or 22 in them.

13. Using meta characters and a single ls command list only the files with a single 2 not 22 in them.

14. In your home directory, capture the ls command piped to more, and the output from more.

15. Issue the which command on ls. Was and where was the command found?

16. Issue the which command on pthread.h. Was the command found? If it was not found why not? How would you modify this.

17. Using only octal values add executable access to test1, test2, test3.

18. Using only alphanumeric characters remove read access from stu1 and stu2.

19. Execute help set

20. Set the noclobber option on err.txt

21. Issue an ls –al redirected to err.txt. What was the output and why?

22. Remove the noclobber option from err.txt

23. Explain the --help option for a program.

24. Explain double quotes, single quotes and the accent

25. Using the **man** page describe what is output by the **env** command with no arguments.

26. Show a shell command that will add the current directory to the **PATH** (without removing any existing variables from the current value of **PATH**.)

27. Describe what you would have to do to make a change to the Shell permanent.

28. Explain how to make a Shell change permanent for all sessions including your current session. (i.e. how do I reload my current session without closing and reopening)

29. Capture the output from the **echo "Current time and date is `date`"** command.

30. Issue the **date** command and capture its output. Now, capture the output from the **echo 'Current time and date is `date`'** command. Note that the ` character is an accent NOT an apostrophe ' . Explain why the output is different in particular to the single and double quotes. Also explain what the ` character does.

31. Create a symbolic link called almost that links to the lab1 directory. Capture the output

32. Change to almost and capture the output.

33. Use "help" to get information on how to use the alias command.
    a. What information is provided in from "help"?
    b. When do should you use "help" compared to when you should use "man"?

34. Create an alias named LA that is ls –al. Capture the output and show it worked.

35. Capture the command to redirect your output from #17 to a file named date.txt.

36. Issue the more or less command on date.txt and capture the output.

37. Capture the long listing of date.txt.

38. Modify date.txt to add executable privileges to date.txt for the owner, Capture the command and proof that the permissions were changed. No other permissions will be changed. You must do this with the octal values.

39. Modify date.txt to remove w from the group. Capture the command and proof that the permissions were changed. No other permissions will be changed. You must do this without using the octal values.

40. Capture the command echo $SHELL.
    a. What shell are you using?
    b. Where do the "shells" live?
    c. Capture the command to switch to a different shell
    d. Capture the command echo $SHELL.
    e. What shell are you using? Why is the shell different than you expected?
    f. Capture the command to leave the different shell

TO TURN IN:

- A PDF file - Name this text file your last name, first letter of your first name lab2.pdf. This file will contain all your answers. I want the question copied and then the answer to the question below it.

- A zip file that contains your pdf, and all text and files created for this lab.

You zip will be named your last name first letter of your first name lab2.zip (example steinerslab2.zip)