CIS-350
Infrastructure Technologies
Lab 3 Report

Student Name: Brandon Berney

Linux commands are case sensitive. The vast majority of them is written in lower case. File names and directory names are also case sensitive. For example, John and john are two different files.

1. What command moves you to your home directory from anywhere? **cd**

2. What command moves you to the parent directory? **cd ..**

3. What command displays your working directory? **pwd**

4. What command moves you to the root directory from anywhere? **cd /**

5. What command displays all files and directories in a long form and includes invisible files? **ls -a**

6. What command displays the contents of file *john*? **cat john**

7. What command allows you to get the manual on-line help on the *cat* command? **man cat**

8. What command would you use to sort data coming from a file *MyFile* and route the sorted output to a file *MyFileSorted*? **MyFile | sort > MyFileSorted**

9. Display the content of the directory in a long form. Include invisible files and protect the directory list from scrolling off the screen. **ls -al | more**

10. What command would you use to open the *pico* editor to create file *homes*? **pico homes**

11. What command would you use to open the *vi* editor to create file *kim*? **vi kim**

12. What command would you use to remove the directory *books*? **rmdir books**

13. What command is used to change the password? **passwd**

14. What does the command *cat kim > names* do?
Takes the data within the *kim* file and copies it into a file called *names*

15. Assume that your home directory is your login directory. Write a command that
    (a) creates 3 directories named *kim1*, *kim2*, and *kim3* in your home directory
    mkdir kim1 kim2 kim3
    (b) copies all files with extension *cc* from your home directory to the *kim2* directory
    cp *.cc kim2
    (c) changes your home directory to the *kim2* directory
    cd kim2
    (d) displays all files in a long form including invisible files in the *kim2* directory and protects the files from scrolling off the screen
    ls -al | more

16. Describe briefly what does a command *cat tom dick harriet | sort* do.
The command would take the output of the files *tom, dick,* and *harriet*, and then sort them.

17. What command do you use to log off from Linux? **logout**

18. Describe briefly which commands did not work. _____
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_____
_____
_____

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Lab 4 Report

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Your home directory is your login directory. Linux commands are case sensitive. The vast majority of them is written in lower case. File names and directory names are also case sensitive. For example, John and john are two different files.

1. What command would you use to create a new file named *FirstNames* using a *pico* editor?
   pico FirstNames

2. What command would you use to create a new file named *LastNames* using a *vi* editor?
   vi LastNames

3. What command would you use to compile program *Prog2.c* written in C language? **cc Prog2.c or gcc Prog2.c**

4. What command would you use to display the directory in a long form, including invisible files? Use piping to prevent the listing to scroll off the screen. **ls -al | more**

5. What command would you use to sort in the descending order the data coming from a file named *FirstNames* and routing the output to a file *FirstNamesSorted*? Execute the command in foreground.
   sort -r FirstNames > FirstNamesSorted

6. What command would you use to sort in the descending order the data coming from a file named *FirstNames* and routing the output to a file *FirstNamesSorted*? Execute the command in background.
   sort -r FirstNames > FirstNamesSorted &

7. What command would you use to grant yourself (the owner) the read, write and execute authority to a file named *FirstNames*? **chmod u+rwx FirstNames**

8. How would you use the *alias* command to change the *ls* command to the *list* command for the current log in session? **alias list=ls**

9. What commands/keys would you use to start (record) and end your interactive session with Linux, and save it in file *Lab4Linux*? **script Lab4Linux, ^D**

10. What command would you use to display the terminal control-key settings? **stty -a**

11. What command would you use to display a banner for *Kim*? **banner Kim**

12. What command would you use to compile a C program named *Prog4.c* and save an object file (if compilation is successful) in a file named *Prog4.out* **cc -o Prog4.out Prog4.c**

13. What steps/commands are needed to move a task/process already running in foreground to background?
    a. **^Z** b. **bg**

14. Say, that Linux assigned the job/task id number = *3* to a task running in background. What command would you use to move this task/process from background to foreground? **fg 3**

15. What combination of keys would you use to erase the entire command? **^U**

16. Describe briefly what does the command *stty -a* do **This command provides information on the various features of the terminal, along with terminal control-key settings.**

17. Describe briefly which commands did not work. _____
    _____
    _____
    _____
    _____

CIS-350
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Lab 5 Report

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Your home directory is your login directory. Linux commands are case sensitive. The vast majority of them is written in lower case. File names and directory names are also case sensitive. For example, John and john are two different files.

18. What does the *echo $SHELL* command do? Describe briefly. **Prints to the command line the directory to shell currently being used (/bin/bash) because SHELL is a variable.**

19. What command would you use to output the directory listing (in a long form and including invisible files) to both the computer screen and file *MyNames* at the same time? **ls -la | tee MyNames**

20. Assume a file named *FirstNames* that you created in your home directory contains several spelling errors. What command would you use to find these errors in file *FirstNames*? **spell FirstNames**

21. Assume that you created a script file named *DisplayMenu*. What command would you use to execute the script file? **./DisplayMenu**

22. What command would you use to display the first 3 lines in a file named *Prog4.c*? **head -3 Prog4.c**

23. What command would you use to display the calendar for year 2019? **cal 2019**

24. What command would you use to put a current shell to sleep for 100 seconds? **sleep 100**

25. Assume that a file named *FirstNames* exists in your home directory. What would the command *wc FirstNames* generate? Describe. **The command would generate the number of lines, words, and characters read from the file along with the filename itself.**

26. Assume that a file named *FirstNames* exists in your home directory. What command would you use to find all occurrences of word *Mary* in file *FirstNames*? **grep Mary FirstNames**

27. What is the command to display the current date? **date**

28. A command that clears the screen is **clear**

29. What does a command *chmod u-rw+x designmenu* do? Briefly describe. **Modifies the permissions of the designmenu file to allow the active user to execute, but not read or write.**

30. An *ls –al Prog4.c* command displayed the following attributes of file *Prog4.c*. Describe all attributes, including the 3 groups of users, access permissions given to each of the 3 groups of users and the permission types.
- r-x r-- --- absmit20 550 Nov 3 16:45 2019 Prog4.c
File Prog4.c was last modified on Nov 3, 2019 16:45 and is owned by absmit20. The file size 550 bytes. The owner has permissions to read and execute. Users in the owner's group can read the file. All other users have no permissions with this file.

31. Describe briefly which commands did not work. **The spell command did not work for me.**