**CIS-350  
Infrastructure Technologies  
Lab 3 Report**

**Student Name**: **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**The total number of points granted for this lab is 50. The answers to 25 questions in this Lab 3 Report are worth 25 points. The other 25 points you earn for the hand-on work in Ubuntu Linux. You must login to your Ubuntu Linux account on the Mercury server and work all of the commands in file** [[File](https://blackboard.louisville.edu/bbcswebdav/pid-18728621-dt-content-rid-66716967_2/xid-66716967_2) *CIS-350-Lab3-Linux Command Prompt.pdf*](https://blackboard.louisville.edu/bbcswebdav/pid-18728621-dt-content-rid-66716967_2/xid-66716967_2). **If you follow the Lab 3 instructions carefully, you should have all the required directories and files stored in your Linux home directory (/home/your\_login\_name; for example, /home/jmzura01). I will go the Linux account of every student to check if the hands-on work was done. If I do not see any activity you will get 0 out of 25 points. If I see partial activity, you will earn between 0 and 25 points. No excuses please and no makeup work.**

NOTE 1: Linux commands, filenames, options, etc. are **case sensitive**. The vast majority of them is written in **lower case**. For example, filenames John, JOHN, and john represent three different files.

NOTE 2: You should find the answers to all questions below in the [[File](https://blackboard.louisville.edu/bbcswebdav/pid-18728621-dt-content-rid-66716967_2/xid-66716967_2) *CIS-350-Lab3-Linux Command Prompt.pdf*](https://blackboard.louisville.edu/bbcswebdav/pid-18728621-dt-content-rid-66716967_2/xid-66716967_2), document named [[File](https://blackboard.louisville.edu/bbcswebdav/pid-19082872-dt-content-rid-66599265_2/xid-66599265_2) CIS-350 Unix-Linux Features, Commands and Utilities.pdf](https://blackboard.louisville.edu/bbcswebdav/pid-19082872-dt-content-rid-66599265_2/xid-66599265_2), and the recorded demo of Labs 3-5 and on Panopto and/or MS Teams.

1. What command displays your working directory? \_\_\_\_\_\_pwd\_\_\_\_\_\_\_\_\_\_\_

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

3. What command moves you to the root directory from anywhere? \_\_\_\_\_**cd/\_\_\_\_\_\_\_\_\_**

4. What command moves you to your home directory from anywhere? \_\_**cd\_\_\_\_\_**

5. What command displays all files and directories in a long form and includes invisible files? **\_\_\_\_ls- I**

6. What command displays the contents of file *Andy*? \_\_\_\_**cat Andy\_\_\_\_\_**

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

8. What command would you use to sort data in the ascending order coming from file *MyData* and redirect (route) the sorted output to file *MyDataSorted*? (Watch the lower and upper case!) \_\_\_**\_$ sort -d MyData>MyDataSorted**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 *nano* editor to create file *students*? \_\_\_\_\_**nano students**

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 *letters*? \_\_\_\_\_\_\_**rmdir letters**

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

14. What does the command *cat students > letters* do? \_**Displays the contents of the students file and sends file information into a file named letters** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. Assume that your home directory is your login directory. Write a command that

(a) creates directory named *mary3* in your home directory

\_\_\_\_\_\_\_\_\_**mkdir mary3**\_\_\_\_

(b) copies all files with extension *cc* from your home directory to the *mary3* directory

\_\_\_\_\_**cp cc mary3**\_\_\_\_\_

(c) changes your home directory to the *mary3* directory

\_\_\_\_\_\_\_\_**cd mary3** \_\_

16. Describe briefly what does a command *cat tom1 | sort* do.

\_\_\_\_**displays the contents of tom1 in alphabetical order**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. Look at the Linux directory diagram below. Circle the correct absolute path to file *prog1*?  
**a. /home/jmzura01/programs/prog1** b. /home/jmzura02/letters/prog1  
c. /home/jmzura01/letters/prog1 d. /home/jmzura01/letters/pay  
e. programs/prog1



18. Look at the Linux directory diagram above. You are already in directory *jmzura01*. Circle the correct relative path to file *prog1*?  
a. /home/jmzura01/programs/prog1 b. /home/jmzura02/letters/prog1  
c. /home/jmzura01/letters/prog1 **d. /programs/prog1**  
e. programs/prog1

19. You have typed the command *ls -al*, pressed Enter key, and the first 10 characters are displayed as

– r w x r - - - - - indicating the file type and file access permissions. Circle the correct access permissions for the owner?

a. –  **b. r w x**  c. r - - d. - - - e. r w –

20. The link (*ln*) command does not copy a file; it merely assigns another name to the same file by creating a new directory entry. Circle the correct answer.

**a. True**  b. False

21. What commercial or open version of Linux you have been using in this lab? Circle the correct answer.  
a. RedHat b. Debian c. Ubuntu d. Gentoo e. X Windows

22. What is the name of the default shell that you have logged into in this lab? Circle the correct answer.  
a. Korn shell b. C shell c. Bourne shell **d. Bourne Again shell or Bash shell**  
e. Joy shell

23. What command do you use to log off from Linux? Circle the correct answer.

a. CTRL-U b. end **c. logout or exit** d. finish e. terminate

24. Unix was created in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Circle the correct answer.

a. 1980’s **b. 1970’s** c. 1960’s d. 1990’s e. 2000’s

25. Linux was created by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Circle the correct answer.

a. Ken Thompson b. Dennis Ritchie c. Bill Joy d. Brian Kernighan  
**e. Linus Torvalds**

26. Linux is an essential component of the course. By putting my full name below, I testify that I actually logged in to the Ubuntu Linux and worked the commands on the Ubuntu Linux system, not just answered the above questions on paper. I acknowledge that I will lose points for not working the lab in Linux.

\_\_\_\_\_\_Destinee Matsoumou\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27. Describe briefly which commands did not work and/or which places in the tutorial need improvement/clarification.

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