

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

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, john, and JOHN are three different files. 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 [CIS-350-Lab3-Linux Command Prompt.pdf](#), document named [\\_CIS-350 Unix-Linux Features, Commands and Utilities.pdf](#), 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 -al**
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 ls**
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 < MyData > MyDataSorted**                      or                      **sort MyData > MyDataSorted**                      or

**cat MyData | sort > 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**                      or                      **ls -al | less**

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?  
**The command routes (redirects) the contents of file students to file letters, without displaying anything on the screen. If file letters does not exist, it will be created. If it exists, it will be overwritten.**
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**

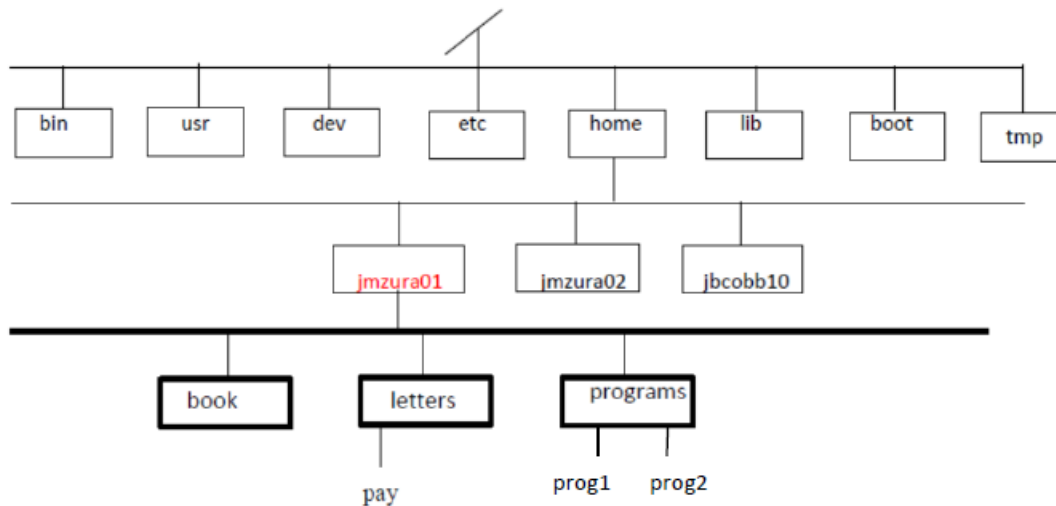
16. Describe briefly what does command *cat tom1 | sort* do.  
**The output from the command cat tom1 is an input to the sort command. The contents of file tom1 is sorted line by line in the ascending order and then displayed on the screen.**

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  
e. programs/prog1

d. /home/jmzura01/letters/pay



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

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