**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. It is OK to use screen shot to capture.**

**NOTE: You must do it on the cslinux machine by using remote login.**

1. Clearly explain why programs should be placed in /bin or /usr/bin.
2. You are asked to use a program named **mystery** that you have never used before. Explain how you would find information on the program regarding what it does.
3. There are many other environment variables available to the user. Capture the **printenv** or **env** command. Describe the environment variable PATH.
4. First use **which** command to locate where the chmod executable is. Then try to delete chmod. Is it deleted? why or why not?
5. Capture the command(s) to create a list of empty text files: test1, test2, test3, test33, st1, st2, st22.
6. Using metacharacters and a single ls command to list all files whose name start with ‘test’.
7. Using metacharacters and a single ls command to list only the files whose name have the number 2 or 22 in them.
8. Using metacharacters and a single ls command to list only the files whose name have a single 2 not 22 in them.
9. Issue the which command on ls, i.e. **which ls**. Where was the command found?
10. Issue the which command on pthread.h, i.e. **which pthread.h**. Was the file pthread.h found? If it was not found, why not? How would you modify this and use another command to find pthread.h?
11. Using only octal number values to add executable permission to test1, test2, test3 for all users.
12. Using only symbolic characters to remove read permission from st1 and st2 for the owner and group users.
13. Using the **man** page describe what is the output by the **env** command with no arguments.
14. Show a shell command that will add the current directory to the **PATH** (without removing any existing folders from the current value of **PATH**.)
15. Describe what you would have to do to make a permanent change to the Shell. For example, how to make an alias permanent in your shell.
16. Create an alias named LA for a command **ls –al**. Capture the output and show it worked.
17. Create a text file using command **cal 2015 > date.txt**. Issue the **more** command or the **less** command on date.txt and capture the output. How to move to the beginning of date.txt in less? How to move to the end of date.txt in less? How to scroll down or up? Please explain if you cannot capture the screen.
18. Add **executable** privilege to date.txt for the owner, Capture the command and prove that the permissions were changed. No other permissions will be changed. You must do this with the octal values.
19. Remove **read permission** from date.txt for the group users. Capture the command and prove that the permission was changed. No other permissions will be changed. You must do this without using the octal values.
20. Try out the command **echo** **b{i,a,o}ke,** capture the output and explain what does the { do?
21. Explain what does the following command do? **cp ~/play/old\*.mp[34]** **/tmp/existingFolder**
22. Try out **!!** and **!cd** command, what do these commands do?
23. Assume you have 5 files in the current working directory, Section.pdf, Lecture.pdf, soundecho.mp3, neck.jpg, Monday.sh. If you type in **ls –l [^A-P]ec\*,** what output you will see? Clearly explain why you see your output.

**TO TURN IN:**

* A PDF file - Name this 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 could capture a screen using screen shot.
* You should turn in through the EWU Canvas system. Go to EWU Canvas 2014 CSCD240-01 🡪 Assignments 🡪 Lab2 🡪 Submit Assignment, then you can choose your zip file to upload.

You zip will be named your last name first letter of your first name + lab2.zip (example smithjlab2.zip for John Smith)