COL100 Lab 1

I semester 2017-18

Week 1, 2017

Objective

Familiarization with Linux hierarchical directory structure and basic commands **ls**, **man** and **more**.

Part 1

1. Turn on your system and login using your kerberos login ID and password.

2. Start a web-browser on your system and then visit the following page:

http://www.cis.rit.edu/class/simg211/unixintro/Filesystem.html

3. Press Ctrl + Alt + T to open a terminal.

4. Read the web page provided above and start doing the exercises mentioned below to get familiarity with the Unix/Linux commands.

5. Create a directory in your home folder (using **mkdir**) and name it as COL100.

6. Change the current directory (using the **cd** command) to COL100.

7. In this directory, create another folder, called as Lab1.

8. Change the current directory to Lab1.

9. Without changing your current directory, list the contents of the root directory (you might want to refer to the **ls** command in the document mentioned in item 2 above)

10. List your current working directory

11. Type the following command

ls /bin > bin_dir.txt

If a command is followed by a ">" sign and then by a filename then the output of the command is sent to the file instead of being displayed on the terminal.

12. Using the command **more**, see the contents of the file bin_dir.txt that you just created using the ls command. Use spacebar to move forward and b to move backwards while the program more is active. Use q to quit.

13. Without changing your directory, list the contents of the / and /usr/bin directories in detail (with -al option) and send the outputs to the files root_dir.txt and usr_bin_dir.txt

14. Check the contents of your current directory.

15. Use **more** command to check if the content of the files bin_dir.txt and usr_bin_dir.txt are correct.

16. Now change directory to the /usr/bin directory using the **cd** command

17. Use **ls** command without any path name to list the contents of your current directory

18. The **man** command gives you the manual pages for the specific unix command. Type **man ls** to get the manual pages on the ls command.

19. Some unix/linux commands also implement –help or –h option to list a brief help about themselves. Type **ls –h** and see the output. Also try **ls –help** to see the output.

20. If you type the pipe symbol "|" after a command and then type another command after the pipe symbol then the output of first command is given as input to the second command. So if you were unable to read the full output of **ls –help** command because your terminal screen was too small to accommodate all of it, then you can experiment with **ls –help | more**

21. You may want to look at the manual for the **more** command by typing **man more**

Part 2

22. Follow the exercises on the following page to get more familiar with the Unix/Linux system (do it in your self-study time if you are unable to complete it in the lab hours).

http://www.cis.rit.edu/class/simg211/unixintro/More_on_File.Ex.html

Important: Make sure that you have completed the "Access Permissions Exercises" in the link above before you come to the next lab. This is required to make you learn about how to prevent your fellow students from copying your work.

23. Challenge question: Write a Linux/Unix command to count and display the number of files in the directory /bin.