

LINUX PRACTICE

The purpose of this project is to encourage you to learn more about your operating system and reinforce your understanding of Linux commands.

To complete each part, turn in an image or a screenshot on Canvas, 1-2 (Max 2) for each part.

Part 1) Draw your directory structure.

Draw **by hand** an upside-down tree of your directory structure starting with root. Model it after slide 5 in lecture 02A_UNIXlect2.1

The directory should include all the immediate directories in your root folder. It should also include:

- a. The path to your home directory
 - b. A path to a program (your choice) in the bin directory. Show the permissions.
 - c. A path to a file in the etc directory. Show the permissions.
 - d. A path to the files in your dev directory. Show the permissions.
- Do you see the permissions starting with c, b or l? What do these mean?

➔ Load up an image of your drawing to Canvas.

Part 2) Install a program downloaded from the internet and make a path to a directory it in your profile. The directory should be called **YOUR_LAST_NAME_CODE**. For example, mine would be called KELLEY_CODE

Try installing blast from this URL. I would try the ncbi-blast-2.13.0+-x64-linux.tar.gz or the ncbi-blast-2.13.0+-x64-macosx.tar.gz

<https://ftp.ncbi.nlm.nih.gov/blast/executables/blast+/LATEST/>

If that doesn't work, just do Zork.

- A) Install the program in your directory, compile it and make it executable.
- B) Create a path in your profile.
- C) Restart the terminal. Then show that this program is executable from any directory in your system.

➔ Load up a screenshot to Canvas.

Part 3) Make a bash script with the following commands. Add comments after each command to explain what these commands are doing.

```
ps -Am | grep '/usr' | head # put comments after commands
grep -c 'libexec' out.txt
date
cal
```

```
whoami
df -i
which python
```

- ➔ Load up the bash script to Canvas.
- ➔ Also run the bash script and redirect the output to output.txt, then load up a screenshot of the text file output to Canvas.

Part 4) Make a cool .profile for your home directory. Add a total of 10 aliases (or other aspects) to your home directory profile and show them in action in your terminal. One of the 10 should be the **remove command** to replace the rm command. NOTE: Your .profile may be called .bash_profile or .zshrc depending on your system.

- ➔ Load up your .profile to Canvas. (You may have to rename it without the "." Before loading it up.)