

COSC 3750
Linux Programming, Spring 2023

Introduction

This is the introductory work you will complete for the course. You need to accomplish these following tasks:

1. Ensure that you have a login for the department Linux system.

- It will be your UW username and a password that you have previously set on the department machines.
- If you are a senior, or were a junior last year/semester, or perhaps took COSC 2030 from Jim, and do not remember your password, email Jim Ward <mailto:seker@uwyo.edu>, from your UWYO account only, and ask for a password reset. He MAY insist that you come in and do it in his office. And don't bother him until January 19th.
- If do not have an account, Jim is creating them. If you have not heard from Jim about your NEW account by January 24, let ME know.

2. Learn to remotely connect to the department Linux system.

- If in the department, use a Windows machine and PuTTY.
- If elsewhere on campus:
 - PuTTY is available on the STEM machines (in 315 and 320) and should be available on all(?) other IT lab machines
 - SSH Secure Shell Client may be available on IT Lab machines or there may me something else. They change periodically.
- If at home, use your favorite, again I recommend PuTTY for Windows. If you have a Linux or Mac machine at home, open a terminal window and use “ssh”.

- From outside the department or at home, you **MUST** connect to “hive.eecs.uwyo.edu.” Inside the department (like from a 4059 computer), you can connect to “hive,” “hive.eecs.uwyo.edu,” “fish[02-20],” or one of “cslab[13-16].”
- If on-campus but NOT on a department machine, then you must use the full machine name like “cslab13.eecs.uwyo.edu” or “fish07.eecs.uwyo.edu”. Otherwise, you will get an error that there is no such host.

3. **Start learning to use a command line interface to Linux.**

To start, I want you go this link, linuxcommand.org/lc3_learning_the_shell.php (Links to an external site.), and do the tutorial on “Learning the Shell.” You really need to complete this by Tuesday so we can talk about some other things. It will be most helpful if you are logged into a Linux machine as you go.

4. Learn to use some editor on Linux.
5. Begin to understand shell programming (scripts) and system utilities.
6. Use the man pages.

These last three you need to work on before next Tuesday. The tutorial that you just did for “Learning the Shell” is followed by “Writing Shell Scripts.” Do that tutorial as well.

There is another version of BOTH the previous tutorials at www.tutorialspoint.com/unix/index.htm and go through the tutorials from **Getting Started** through **Manpage Help**.

Even though you may not like it, please try to use the VI (vim or gvim (GUI version) editor a little. You will NOT have to use it for all your programming but it is similar to *ed* which you will have to use. We’ll talk about other editor options next week. Make sure that if you have problems/questions you have them ready to ask on or before Tuesday (January 24).