

CS 221: The Linux Operating System
Assignment 1
Getting Started with Linux

Introduction

During this hands-on project, you will login to a Linux workstation, use a few commands, and generally start to get comfortable on a Linux system. The purpose of this lab is experimental: try the commands; try to figure out what they do; and try looking them up in the textbook, the videos provided on Blackboard, or online. This assignment will be much easier if you read Chapter 1 from the textbook first!

Getting Started with Linux

1. Log in to your Linux machine and open a terminal window.
2. Create a file named `assignment_1` in your home directory by using the script utility. The script utility captures your session. This means that the system will start “recording” all your input and output into a file named `assignment_1`. In other words, it will create the file, `assignment_1`, to submit for this assignment.
3. Type `stty -a` to see a list of all the attributes of your terminal.
4. Issue a Linux command to show your username.
5. Issue a Linux command to show information about users who are currently logged in to your system.
6. Issue the command `w` to show who is logged on to your system and what they are doing.
7. Issue a Linux command to show the ID number of the terminal that you are using.
8. Issue a Linux command to show the full path name of your home directory.
9. Issue a Linux command to show your user ID (only your user id, nothing else should show up).
10. Issue a Linux command to show all users who are currently logged in, use the utility that displays the user’s name.
11. Exit from the script utility.
12. Lookup the man pages of the commands and utilities that you will need to do the following steps in order to find the right option. Do not show the man page in the script output file (look up the man page before starting script as instructed below).
13. Start the script utility again, make sure to append to the same file `assignment_1` so you do not lose your previous work.
14. Use one command to show the calendar for the previous month, current month, and next month.
15. Start the calculator and show the result of the division problem: $1 / 3$, show the result with 2 digits after the decimal point.
16. Show the current date and time.
17. Make a directory named `CS_221`.
18. Change your working directory to `CS_221`.
19. Create three new directories named `Assignments`, `Examples`, and `Web`.
20. Show a listing of the current working directory, use an option of the list command so you can see what file type each file is, but do not use the long listing option.
21. Change the permissions of the directory `Web` to `-rwx r-x r-x`.

22. Change your working directory to `Examples`.
23. Without using an editor, create a new, empty text file called `temp1`.
24. Check the permissions.
25. Change the permissions of `temp1` to `-rw-r--r--`.
26. Copy `temp1` to a file called `temp2`.
27. Create a directory named `Temps`.
28. Move the file `temp2` to the directory `Temps` and rename it `temp`.
29. Change working directory to `Temps` and check permissions.
30. Move up one directory.
31. Remove the directory `Temps` and its contents.
32. Without changing directory, do a listing of the root directory, use an option of the list command so you can see what file type each file is, but do not use the long listing option.
33. Look up the man page of the print utility and find the option to change your username (your login id) to `FirstName_LastName` (note the underscore between the 2 names) when printing the hard copy. Then print a hardcopy of `assignment_1`, using the correct option so your `FirstName_LastName` is shown on the cover page.
34. Exit from the script.

Submission Instructions

Submit your `assignment_1` file on Blackboard.