

Fun and Learn

1. Use `script` command to save the work in a file named `<yourname>-week1.script`. Do a `man script` first before you do this to check how it works. You will eventually submit the script output, so you **MUST** do this task first. This command will start a session in which everything you type on the terminal will be recorded. It will return with a command prompt. Continue with the next instruction below. Note that the script command will only record what you do in that terminal window (or shell session) only. So, ensure that you do all your work in that window alone. Else you will lose your work.
Note : All the data required for the in lab assignment and the take home assignment is given in `Data.tar.gz`
2. Go to your home directory using `cd` or `cd ~/`. Use `mkdir` command to make two directories `lab1` and `assignment1`, `lab1` should be in `assignment1` and do this with one command.
3. Use `cd` command to navigate into the directories and use `touch` command to make 3 files in the `lab1` directory named `lab1_1.txt`, `lab1_2.doc`, `lab1_3.odt` and in the `assignment1` directory named `assignment1_1.txt`, `assignment1_2.doc`, `assignment1_3.odt`
4. Use the `cat` command to copy the content of the given file `iit.txt` file into all the files of `assignment1` directory and `lab1` directory.
5. In the `lab1` directory, use `ls` command to display only the `.txt` files, then only the `.doc` file and then only the `.odt` files.
6. Use `pwd` command to print the full path of the `lab1` directory. Understand the concept of full vs relative paths.
7. Make a file named `commands.txt` inside `assignment1` directory using `cat` command and write "`ls`" command in it. Do NOT use any editor to do this. Make it executable for user and group only using `chmod` and then execute it.
8. Use `cat` command to create a file called `names.txt` in the `assignment1` directory and copy the contents of the given file `find.txt` in to it. 9. use the `head` command to display the first 15 lines of the `names.txt` file
10. use the `tail` command to display the last 15 lines of `names.txt` file
11. use `more` and `less` command to display the contents of the `names.txt` file
12. copy the file `names.txt` into the `lab1` directory using the `cp` command
13. make a new directory named `moved_content` inside `assignment1` directory using `mkdir` command and use `mv` command to move `names.txt` file into it
14. Use `grep` command to search the word "the" in all the `.txt` files of the `assignment1` directory, also use the `grep` command to search the word "the" in all the files in the `assignment1` directory.
15. Move the given file named `info.txt` to the `lab1` directory and then use the `grep` command to count the occurrence of the number "5" in the file.
16. Display only the "the" word in all the files in `assignment1` directory without displaying the entire line using `grep` command.
17. Display all the "the" without considering the case sensitivity in all the files in the `assignment1` directory using `grep` command.
18. Display the file name of all the files that contains the word "the" in all the files in `assignment1` directory using `grep` command.
19. Be in the home directory and use `find` command to find the file `lab1_1.txt` in the `assignment1` directory
20. Make an empty file named `empty.txt` inside the `lab1` directory using `touch` command, then return to home directory and use `find` command to search for a file having 0 bytes

size

21. Use `find` command to display the files that were accessed 0.0002 days ago in the `assignment1` directory
22. Display the space of the disks in GB using the `df` command
23. Create a sleep job for 5 minutes as a background job using `sleep` command and list the jobs running in the background using `jobs` command
24. Use `fg` command to bring the sleep job in the foreground and stop it using `^z`. Display all the stopped jobs using the `jobs` command
25. Use `bg` command to run the sleep job in the background and display all the running jobs using the `jobs` command
26. Get the process ID of all the running processes on the machine using the `ps` command
27. Write a command to display all the running processes using `ps` command, pipeline it with `grep` command to search for “bash” processes. Understand the concept of pipes in Unix. You will use this later.
28. remove the file `commands.txt` from the `assignment1` directory using `rm -i`.
29. use `rm` command to first empty the `lab1` directory and then use `rmdir` command to remove the directory.
30. Use `rm` to delete `assignment1` directory(non empty)
31. list the file operations using the `ls -l` command
32. Use `uptime`, `w`, `finger`, `uname` command to see what the output it display.
33. Using `whereis` command, find out the source, binary, and manuals sections for `grep`, `ls`, `man` command.
34. Using `which` command, locate the full path of the executable associated with `dpkg`, `ls`, `sudo` command.
35. Use `man` command to see the detail of function `ping`, `fgrep`, `rpm`, `tee` command. Use `tee` command to append the text “I love my India” into the blank file `test.txt`
36. ****skip**** Run `rpm` command to check whether MySQL has been installed in the system or not.
37. Get your ip address of your neighbor’s system and then test its network connectivity using `ping` command. Use `ifconfig` to determine the IP address of your system.
38. Using `wget` command down the pdf from <http://linux-training.be/linuxfun.pdf>
39. Given the large text file `sample.txt` in Data folder, using emacs editor perform the following tasks:-
 - a. Jump to the first line
 - b. Delete 5th character from line 60.
 - c. Add a new line after line 70 and input the text “line 60 was edited”
 - d. Find the entry of word “imperdiet”
 - e. Replace all the words “non” with “changed”
 - f. Save the file as `tmp-1`
40. Do all emacs exercises listed in slides 113/114 of the Unix CLI presentation. Become really familiar with Emacs since its much much more than a editor - its an environment where you can program, compile, check mail, browse the web and do anything you want to with a computer.
41. As you know Vi (or Vim) is another popular editor on Linux/Unix. Do all the exercises listed on slides 101/102 for Vi. Vi is the default editor present on every variant of Linux or Unix. So, its useful to be familiar with all the shortcuts in Vi/Vim.