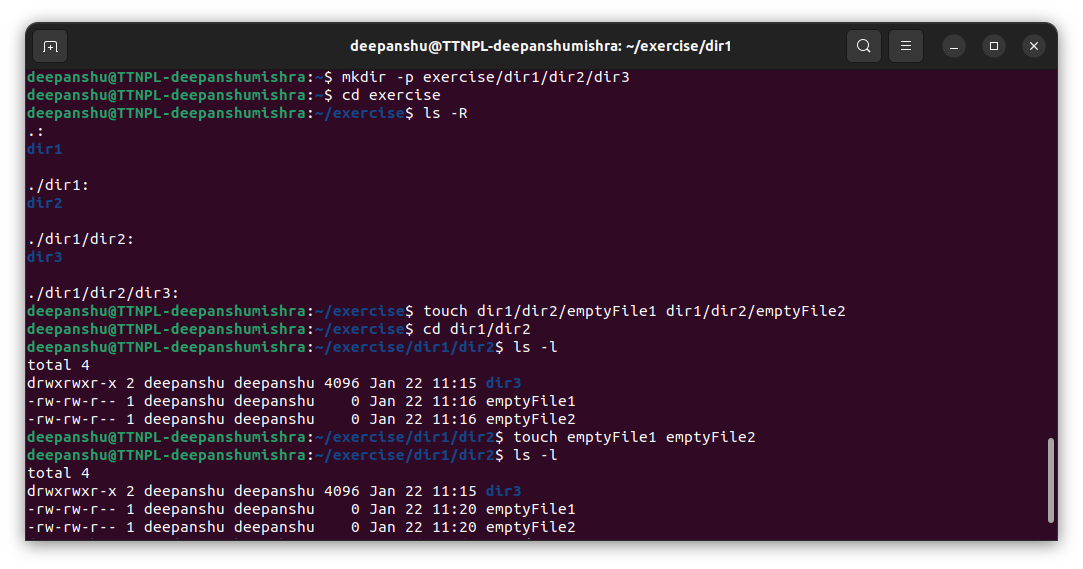
**Introduction to Linux**

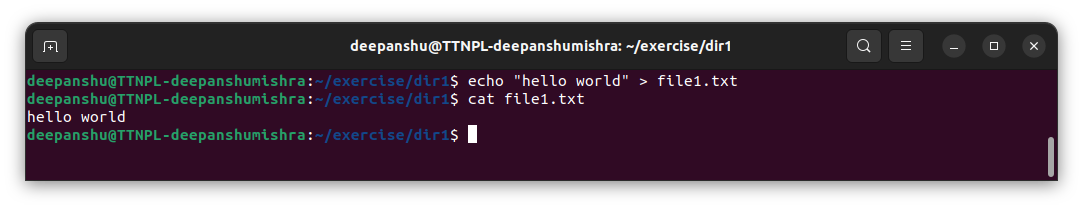
**Assignment/Exercises**

https://docs.google.com/document/d/1lOkMbjbpMzNU9oX0piPSDyyTk2eP\_kUzlMtB2qfrsfE/edit?tab=t.0

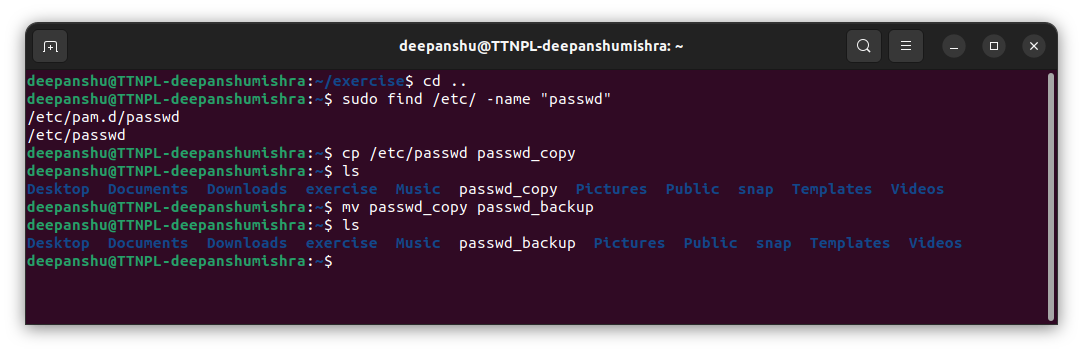
1. Create a directory "exercise" inside your home directory and create a nested (dir1/dir2/dir3) directory structure inside "exercise" with single command.
   1. Create two empty files inside dir2 directory: emptyFile1, emptyFile2 in single command
   2. Change the timestamp of empty File1, emptyFile2 which are exist in dir2.



* 1. Create one file file1.txt containing text "hello world" and save it.

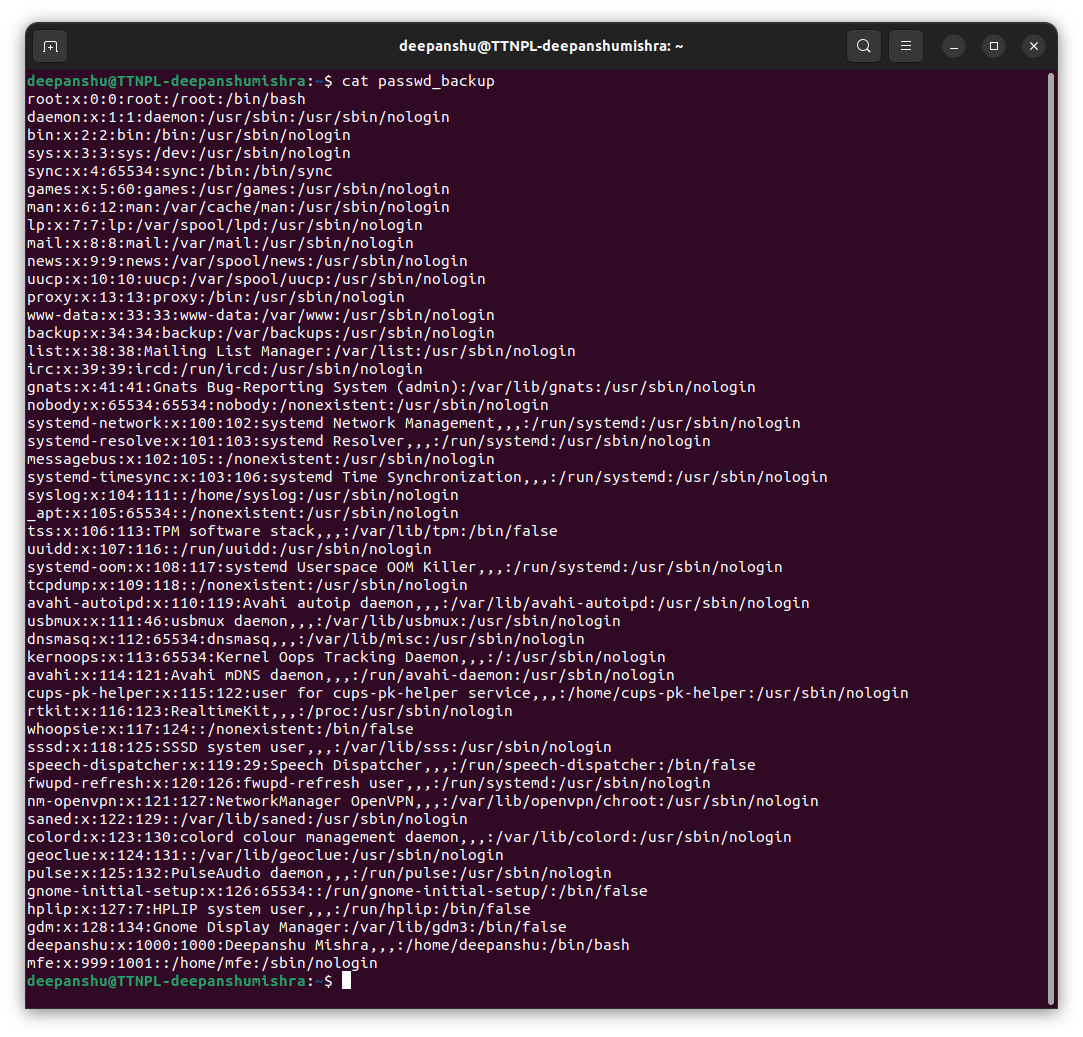


1. Find a "passwd" file using find command inside /etc. copy this files as passwd\_copy and then rename this file as passwd\_backup.



* 1. Try reading passwd\_backup file in multiple tools: less,more,cat,strings etc and find the difference in their usage.

I. cat: used to concatenate different files, create new files and also displays content of the specified file

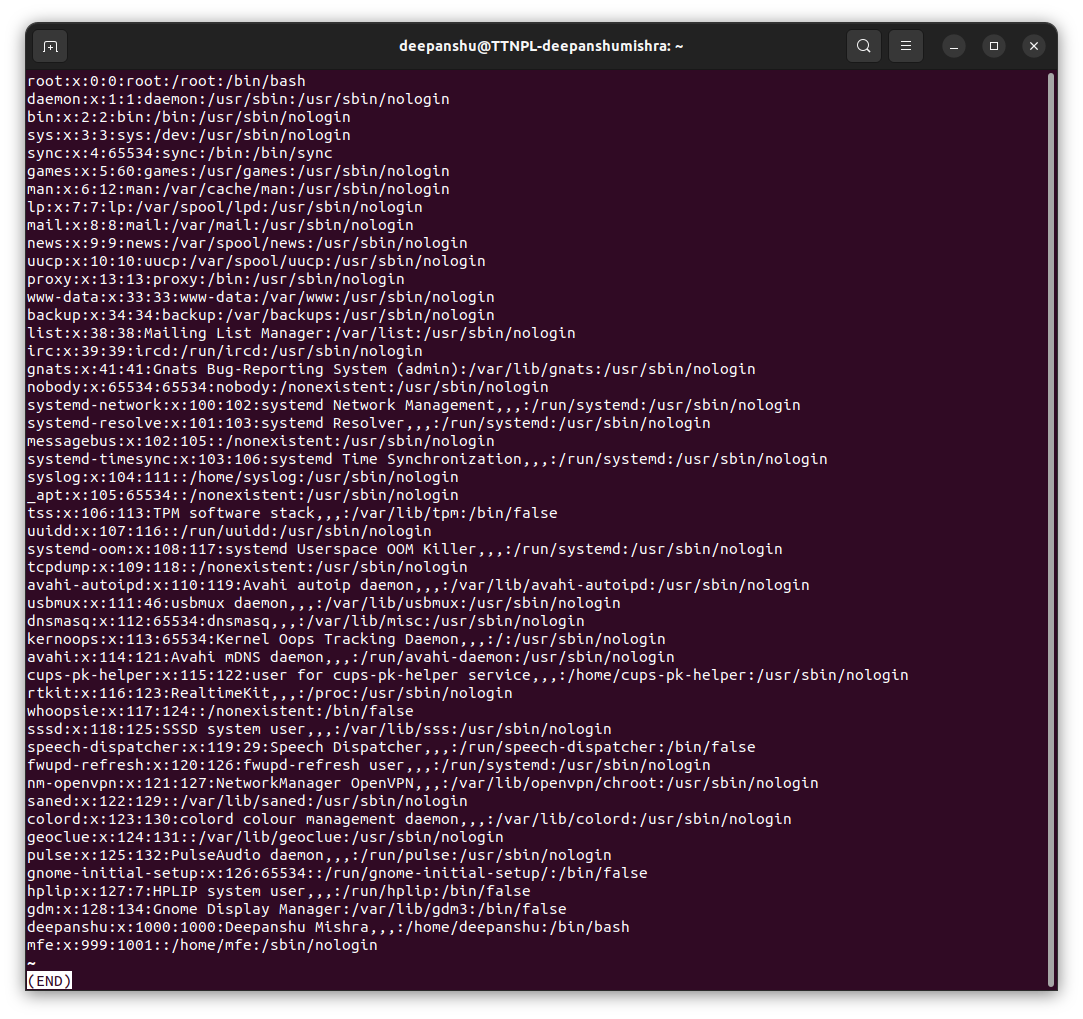


II. less: shows contents of a file one line at a time backwards and forwards

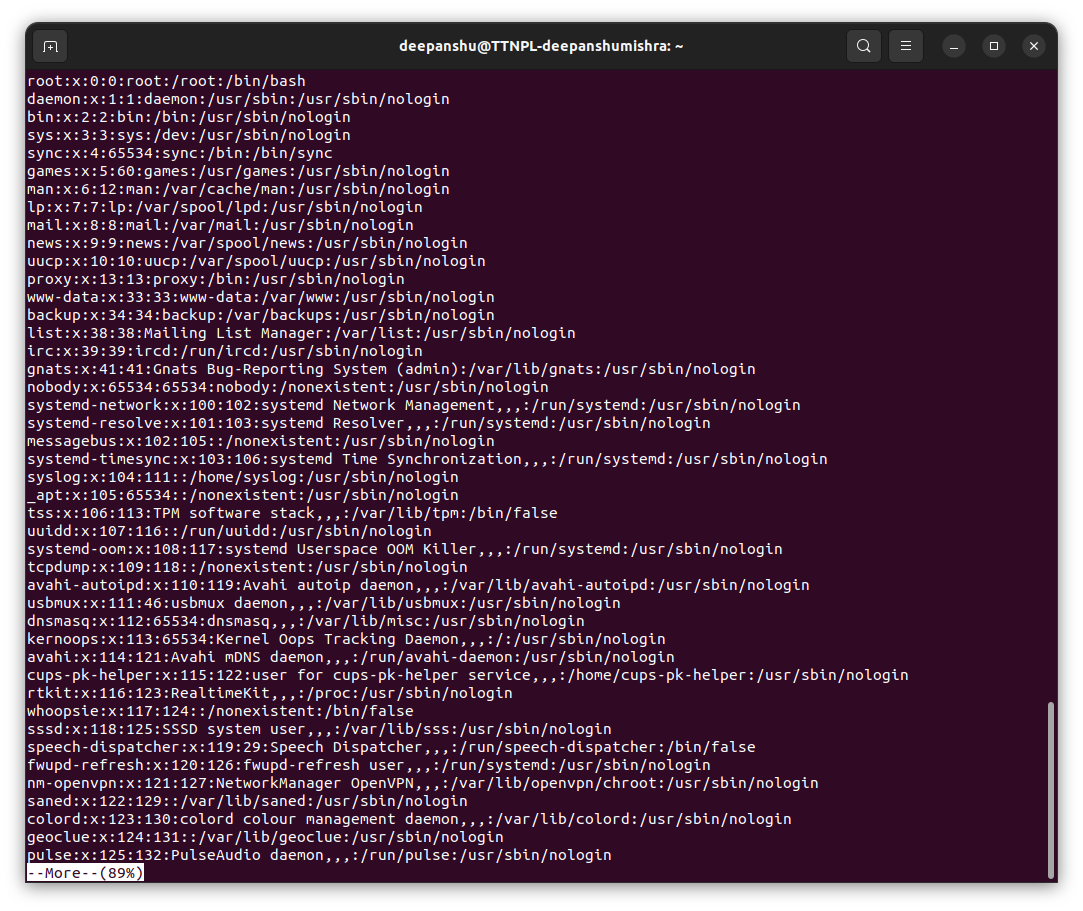
Can show active changes in a file with +F

Can show in reverse order with +G

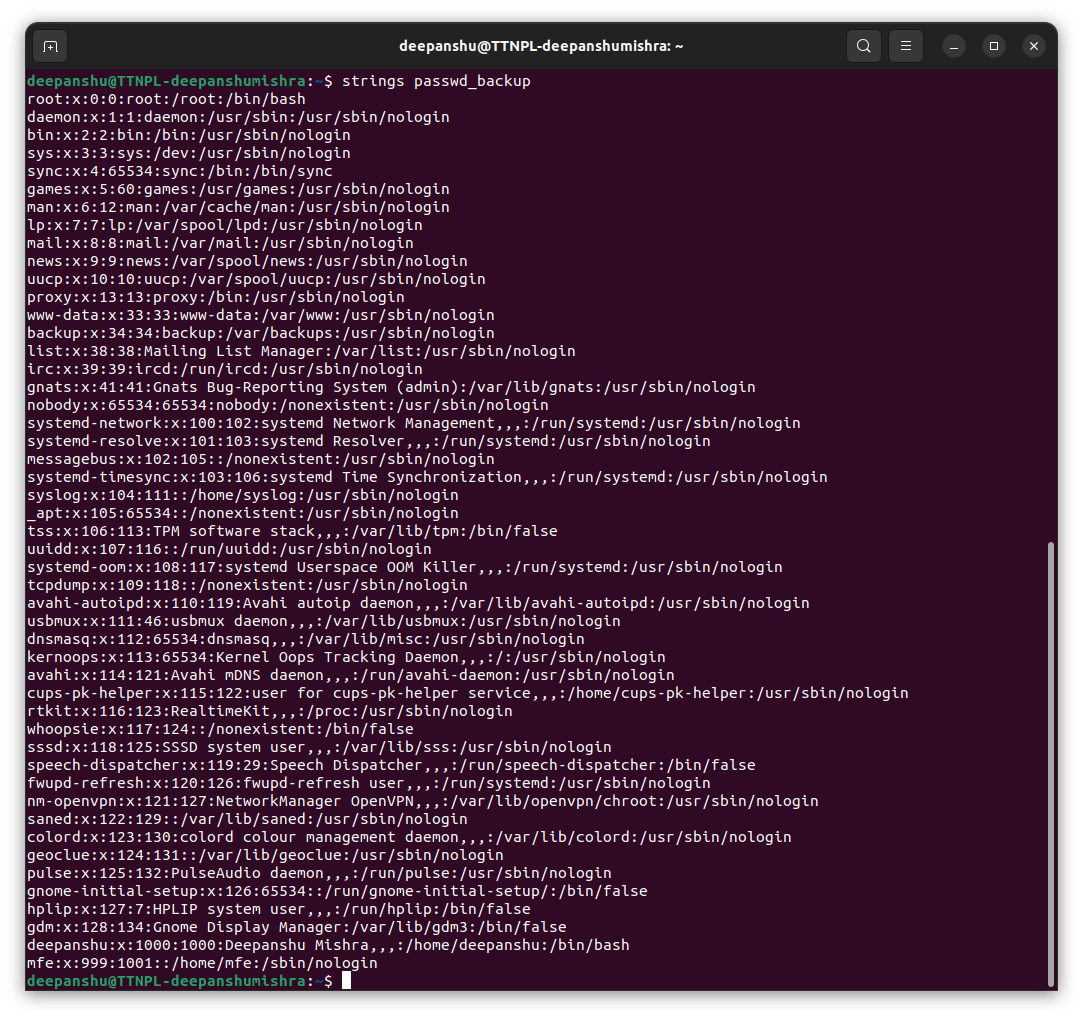
Can show contents with line number with -N



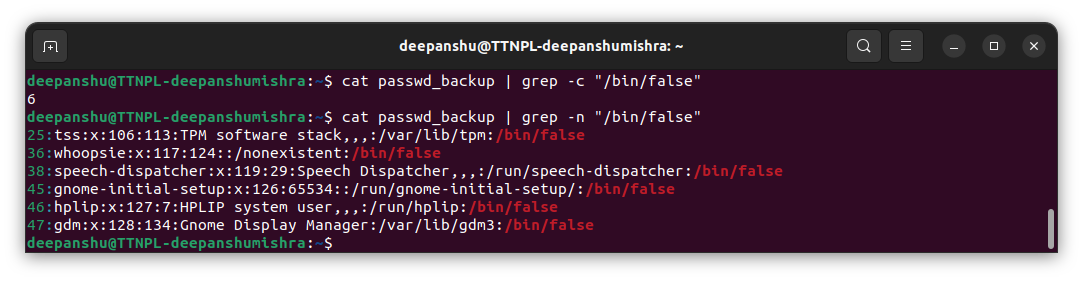
III. more: shows contents of a file one screen at a time, also shows the progress in file at the end



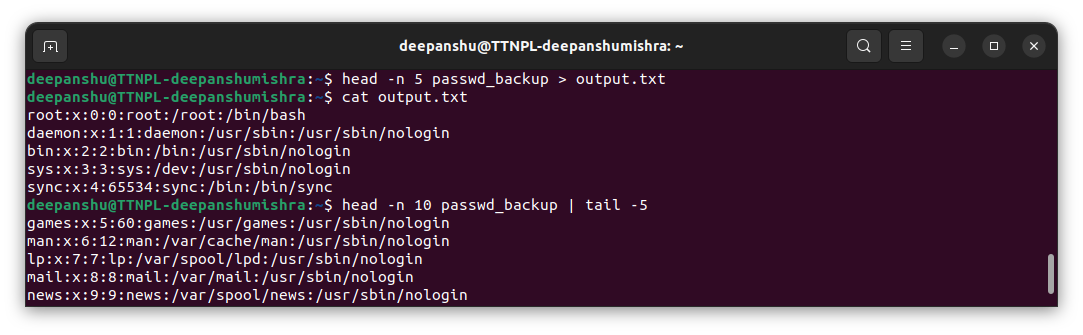
IV. strings: shows strings present in a file



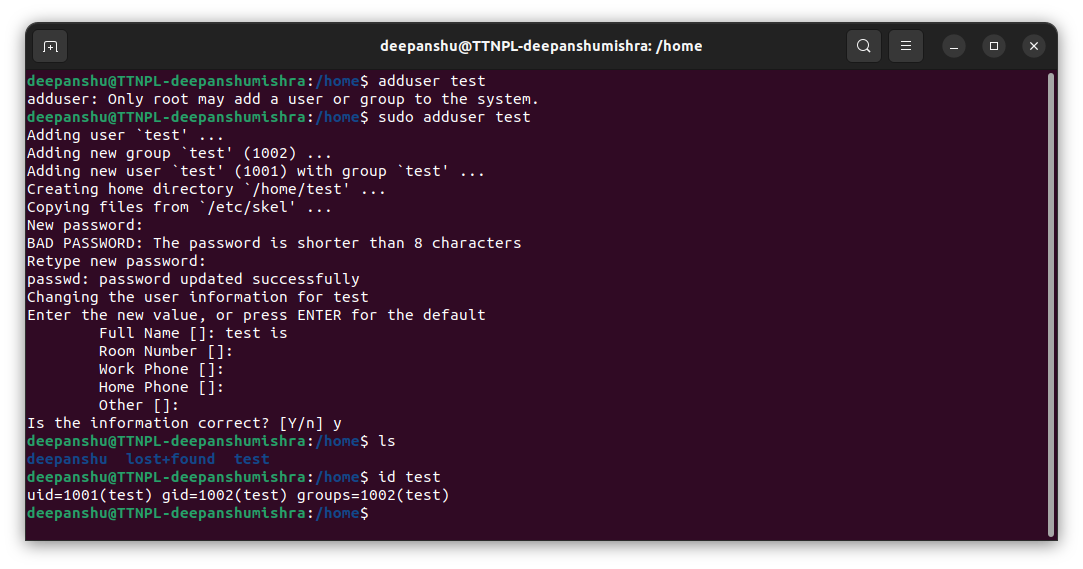
* 1. Find out the number of line in password\_backup containing "/bin/false".



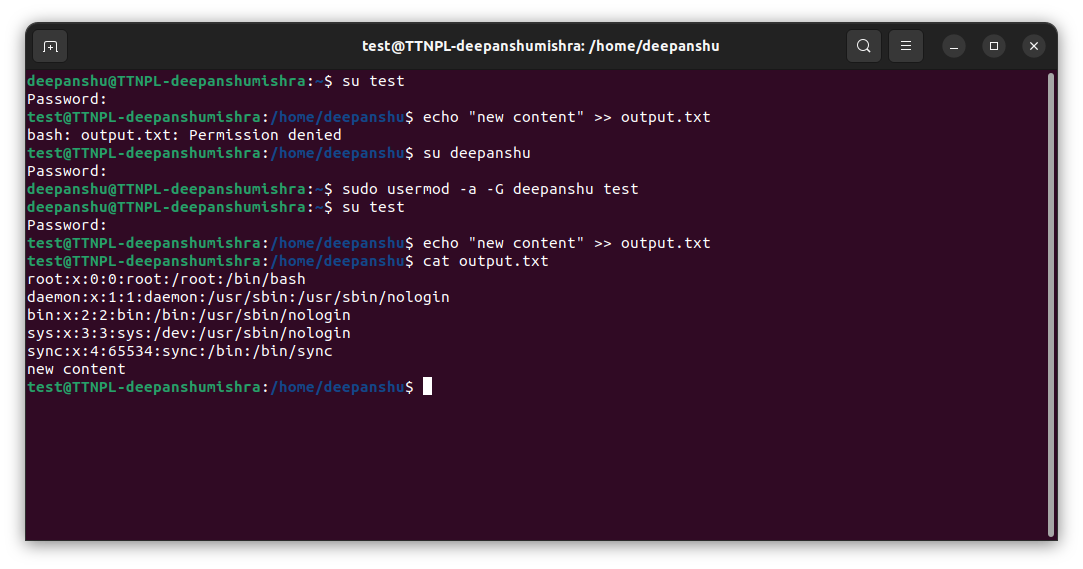
* 1. Get the first 5 lines of a file “password\_backup” and Redirect the output of the above commands into file "output". Also, get the lines 6-10 from the above file.



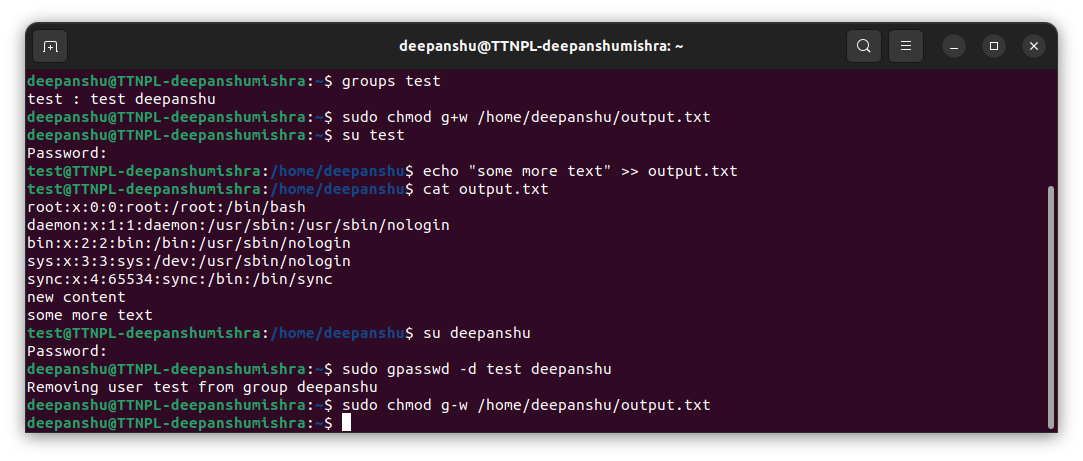
1. Create a "test" user,create its password and find out its uid and gid.



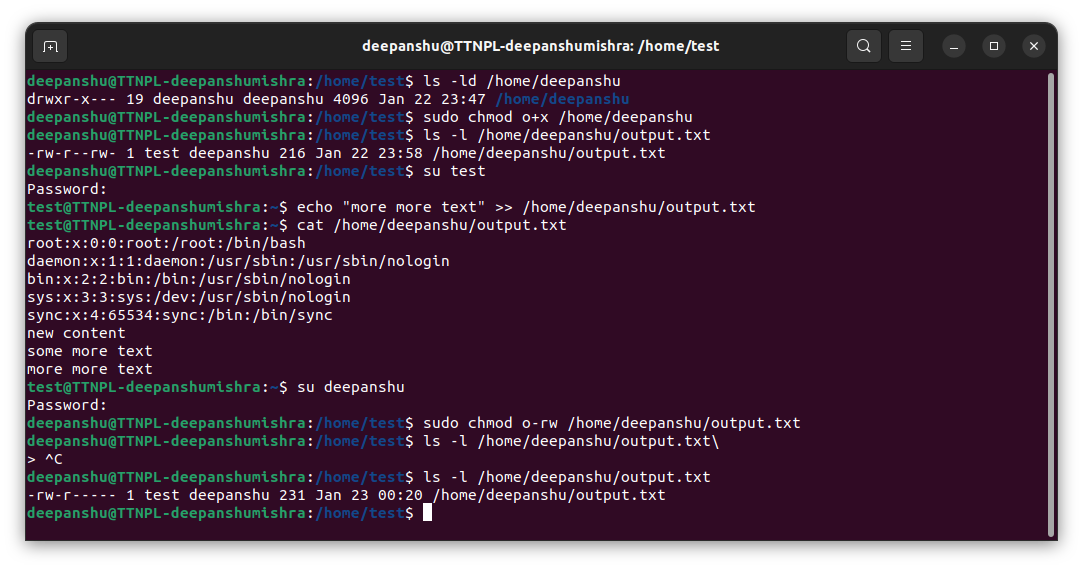
* 1. Login as test user and edit the "output" file created above. Since the permission won't
  2. llow you to save the changes. Configure such that test user can edit it.



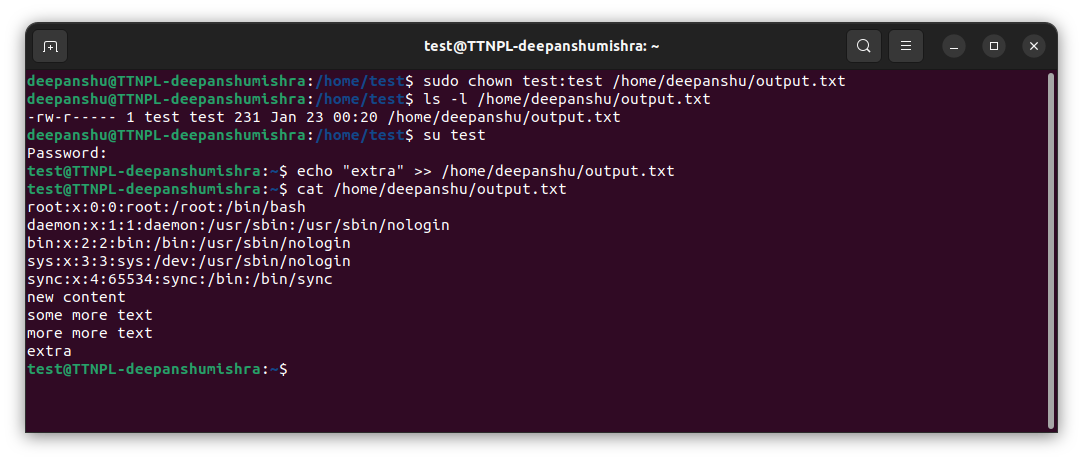
* 1. Add group owner of the "output" file as the secondary group of test user and check/change the "output" file permission if it is editable by group. Once done revert the changes



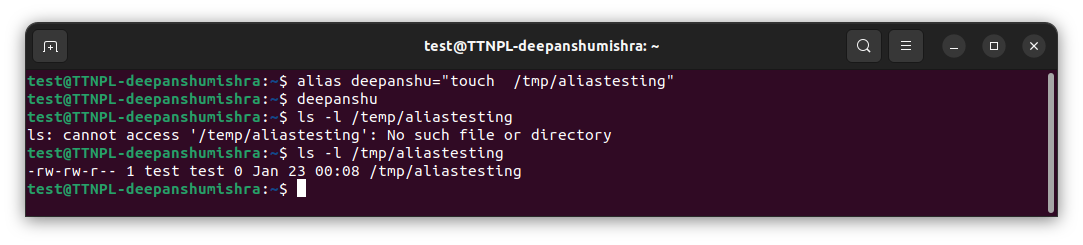
* 1. Make the file editable to the world so that test user can access it. Revert the changes after verification



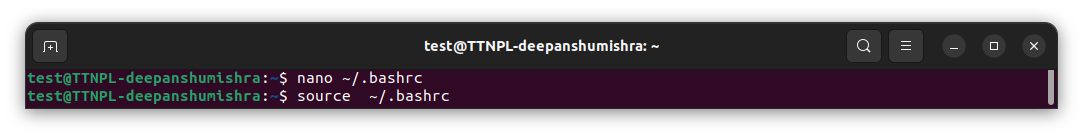
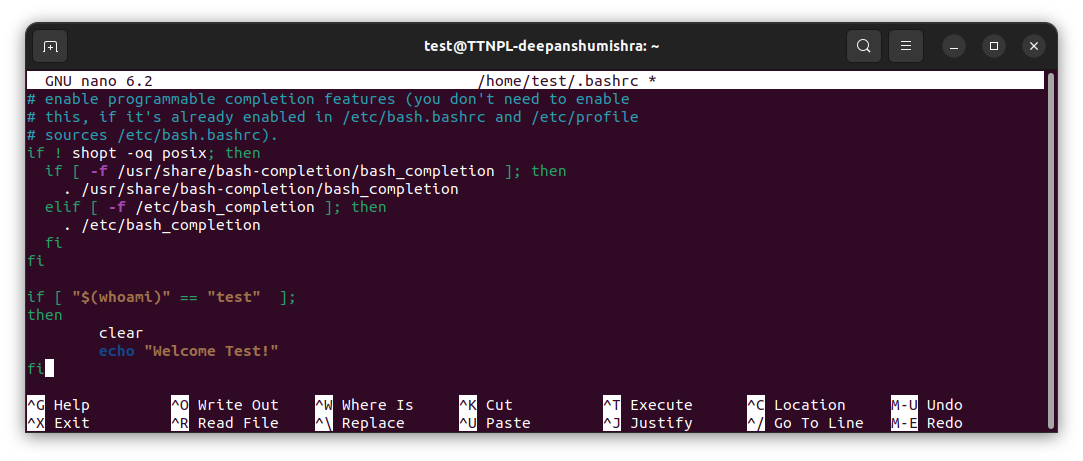
* 1. Change the ownership to edit the file.

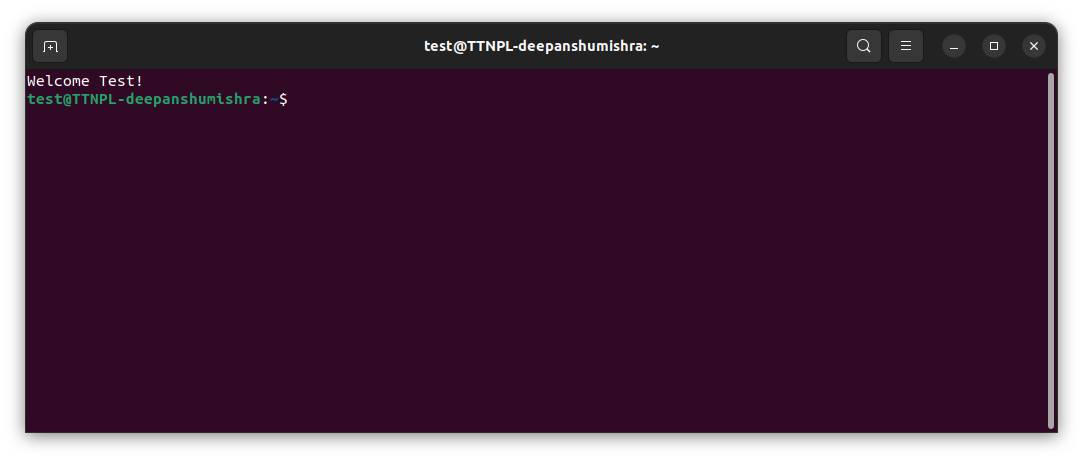


1. Create alias with your name so that it creates a file as "/tmp/aliastesting".

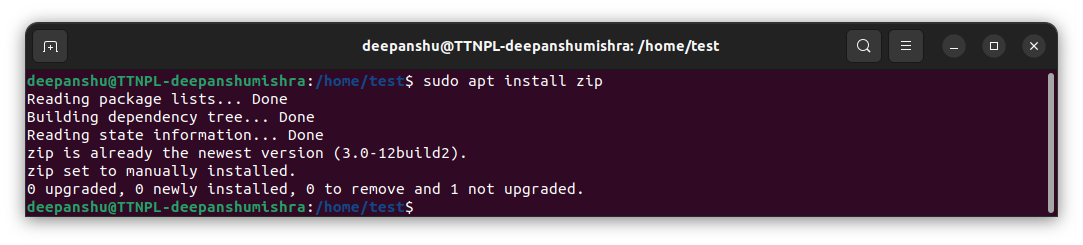


1. Edit ~/.bashrc file such that when you change to "test" user it should clear the screen and print "Welcome".

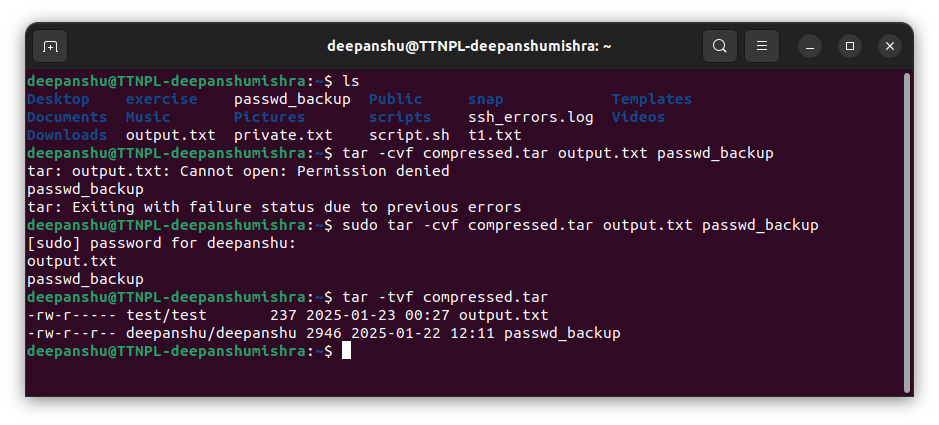




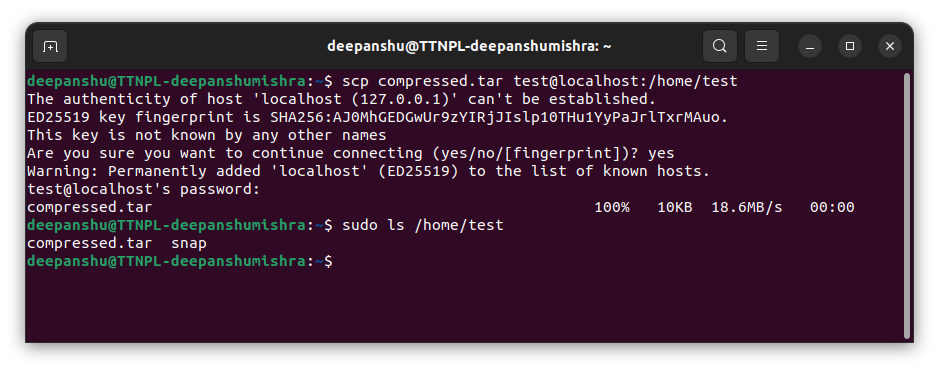
1. Install “zip” package.



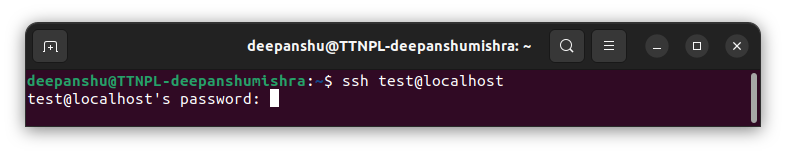
1. Compress "output" and "password\_backup" files into a tar ball. List the files present inside the tar created.

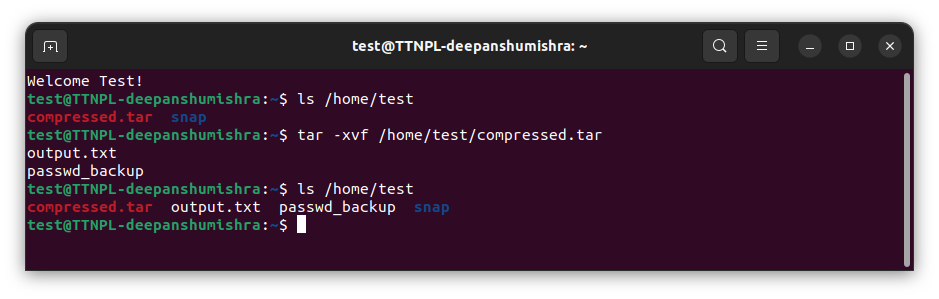


1. scp this file to test user home location.

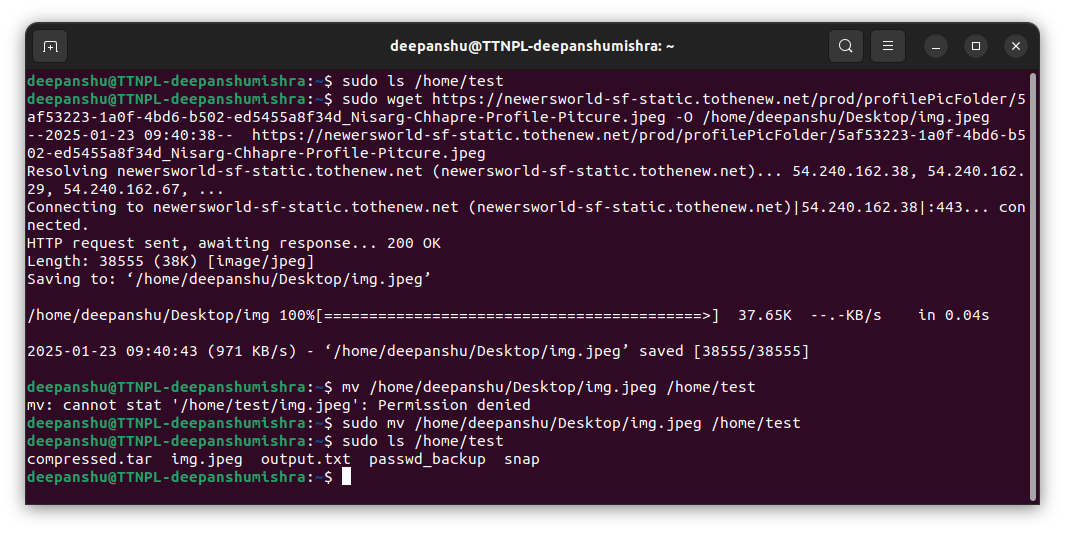


1. Unzip this tar bar by logging into the remote server



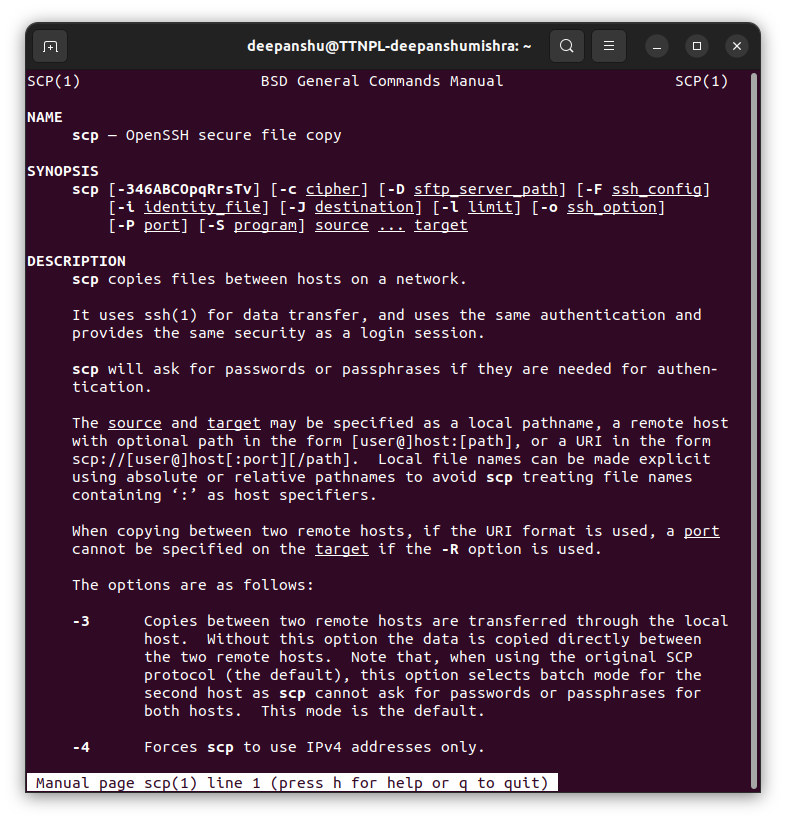


1. Download(via cli) any image from web and move(via cli) to test user home location.

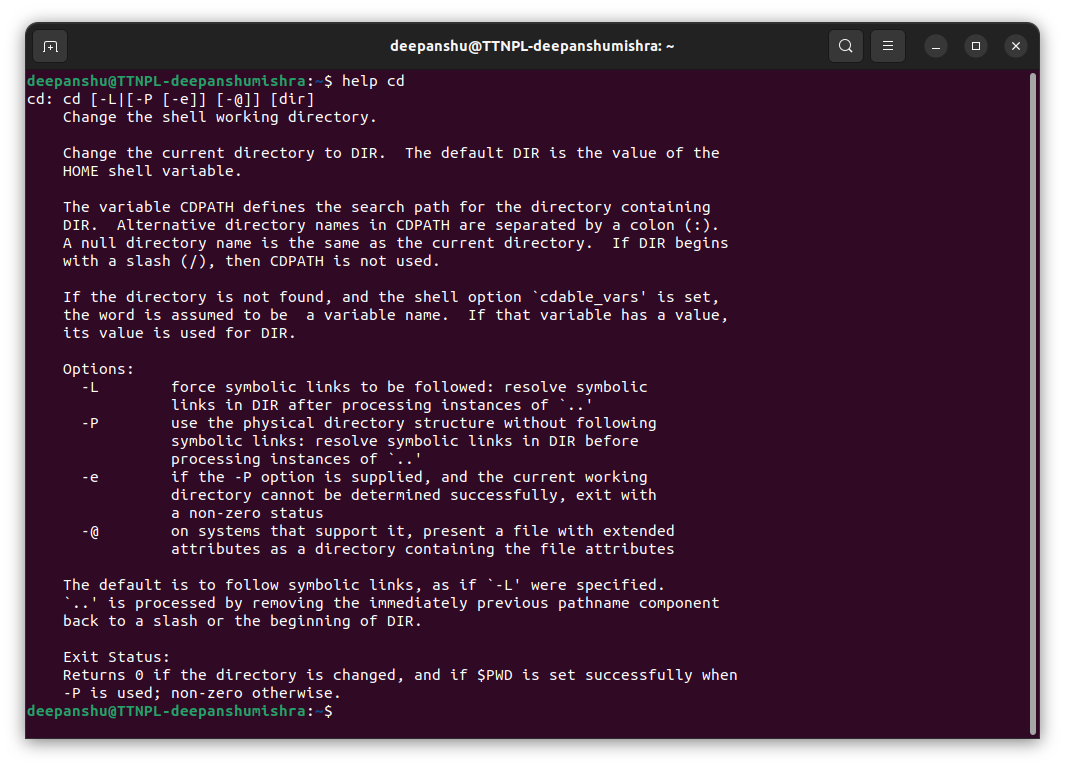


1. How to get help of commands usages.

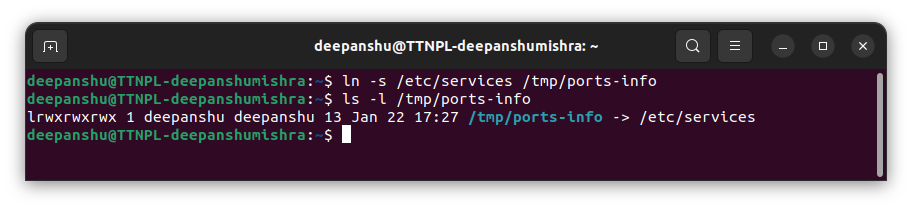
Considering we need help on the scp command, we can use man for info or manual on this command for usage



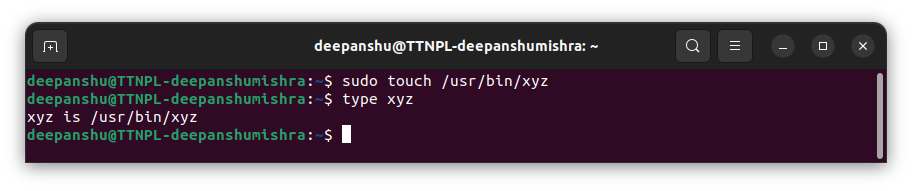
Or we can use help command for binaries like cd



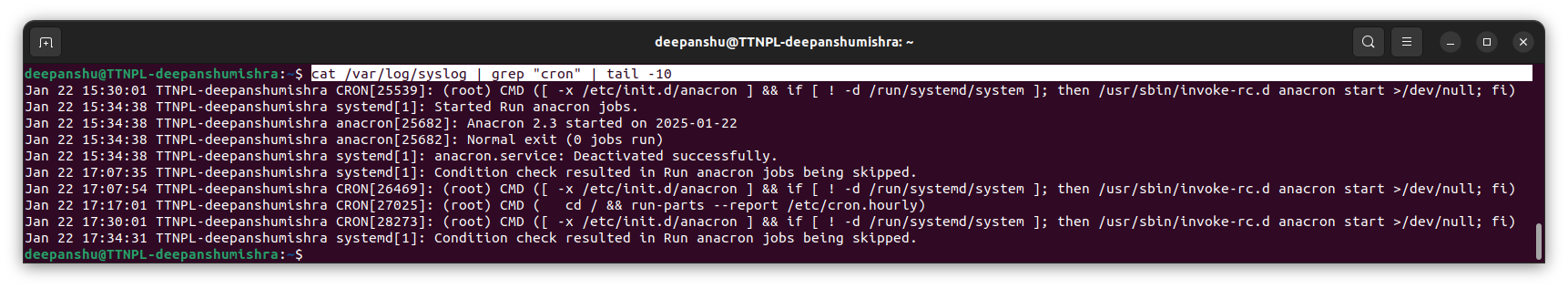
1. Create a symlink of /etc/services into /tmp/ports-info



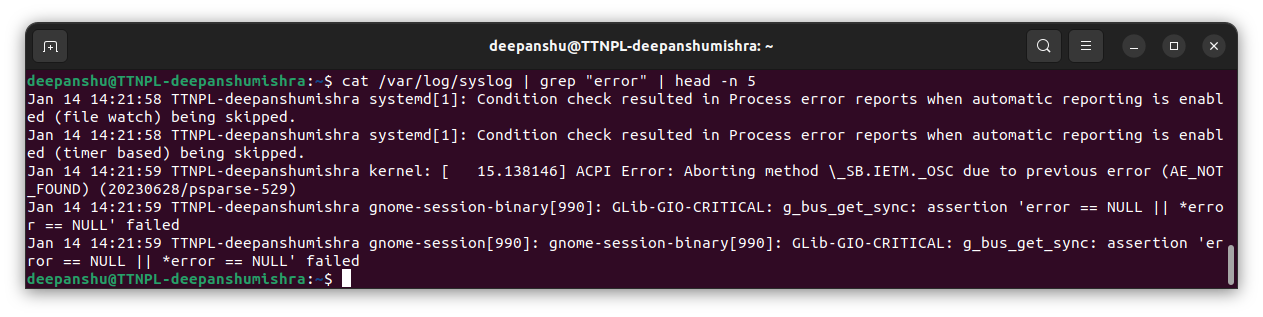
1. You are appointed as a Software Engineer in ABC media services. On your first day you need to troubleshoot a problem. There is a command “xyz” somewhere installed in that linux system. But as a new joinee you do not have any idea about where is that Installed. How can you check that?



1. Analyze the /var/log/syslog file to gather specific information.
   1. Extract the last 10 lines from the syslog file that mention the word "cron."



* 1. Find and display the first 5 lines in the syslog file containing the keyword "error."



* 1. Save the last 20 lines of the syslog file containing the word "ssh" to a new file named ssh\_errors.log.

