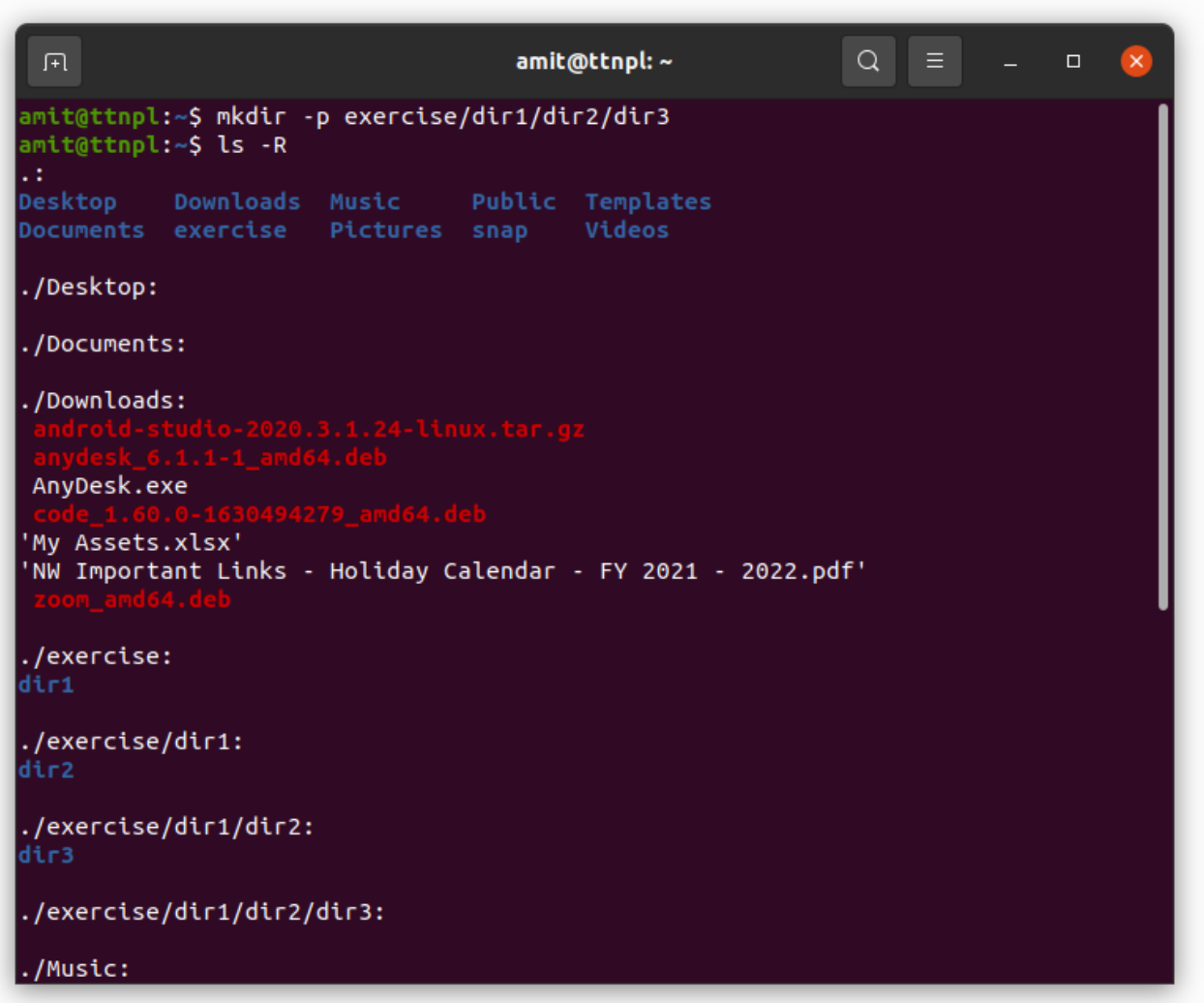
1.Create a directory "exercise" inside your home directory and create nested(dir1/dir2/dir3) directory structure inside "exercise" with single command.

Command

“mkdir -p exercise/dir1/dir2/dir3”

Screenshot

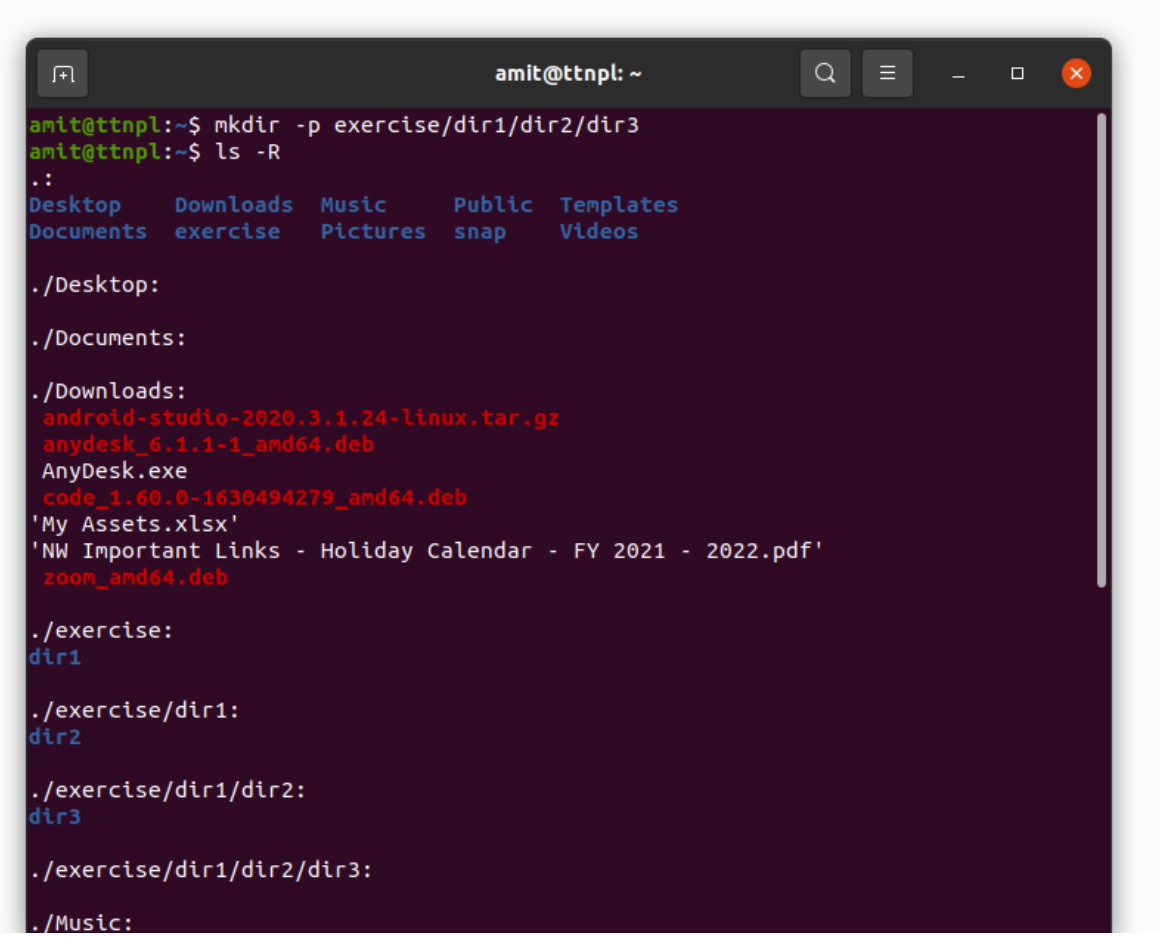


2.Create two empty files inside dir2 directory: emptyFile1,emptyFile2 in single command and Remove the dir2 direcroty

Command

touch file{emptyFile1,emptyFile2}

Screenshot



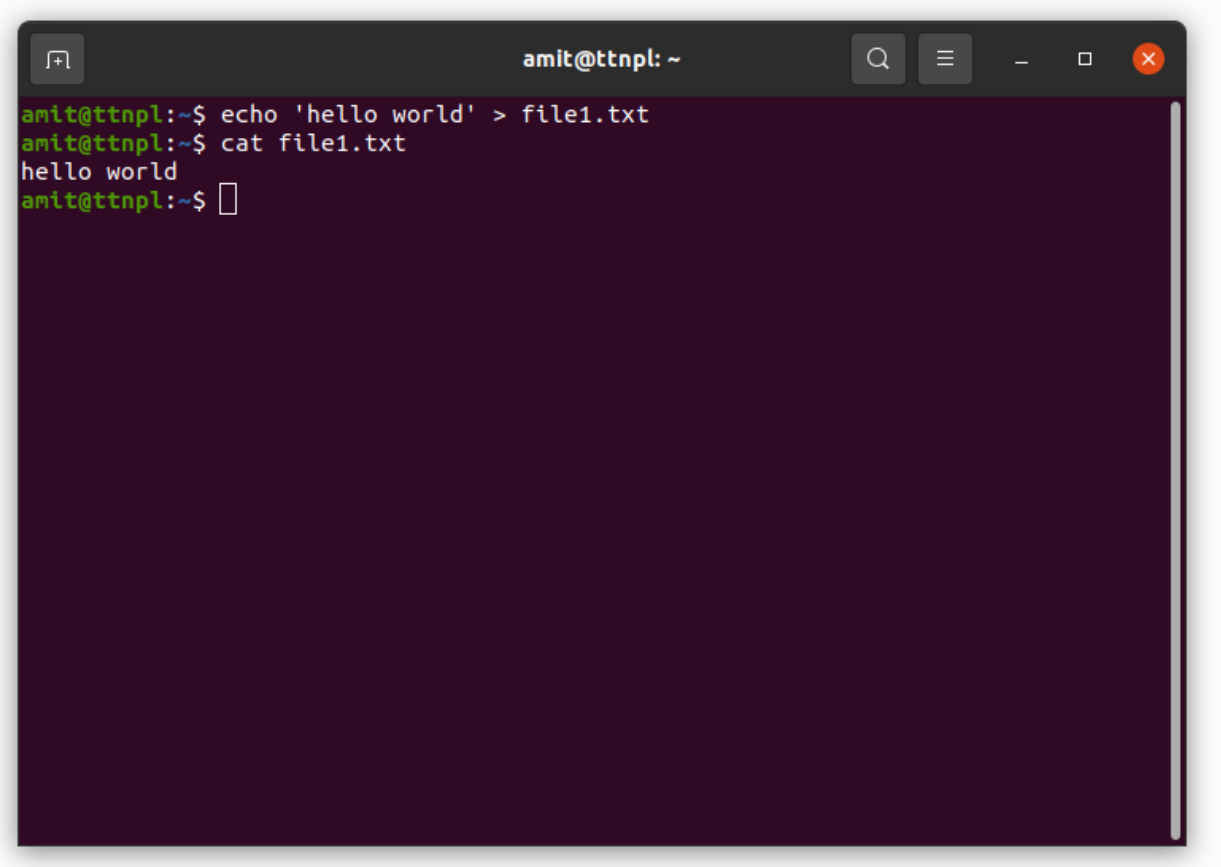
3.Create one file file1.txt containing text "hello world" and save it.

Command

echo 'hello world' > file1.txt

cat file1.txt

Screenshot

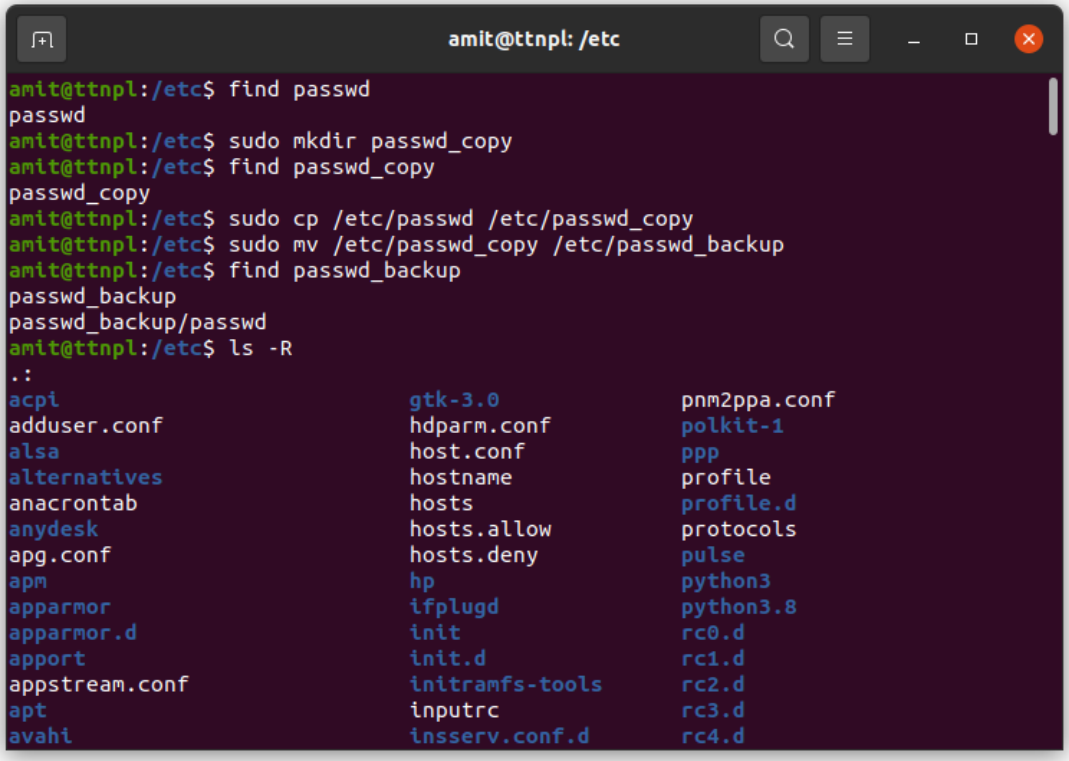


4. Find a "passwd" file using find command inside /etc. copy this files as passwd_copy and then rename this file as passwd_backup.

Command

find passwd
sudo mkdir passwd_copy
sudo cp /etc/passwd /etc/passwd_copy
sudo mv /etc/passwd_copy /etc/passwd_backup

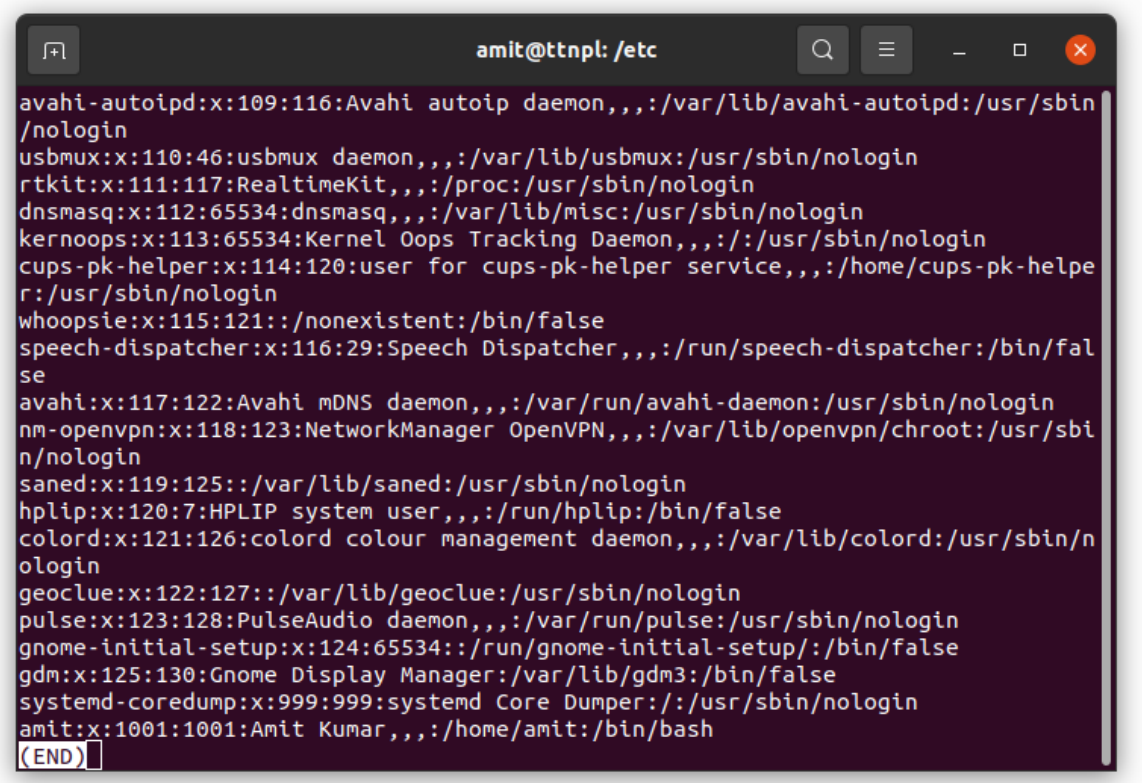
Screenshot



5. Try reading passwd_backup file in multiple tools: less,more,cat,strings etc and find the difference in their usage.

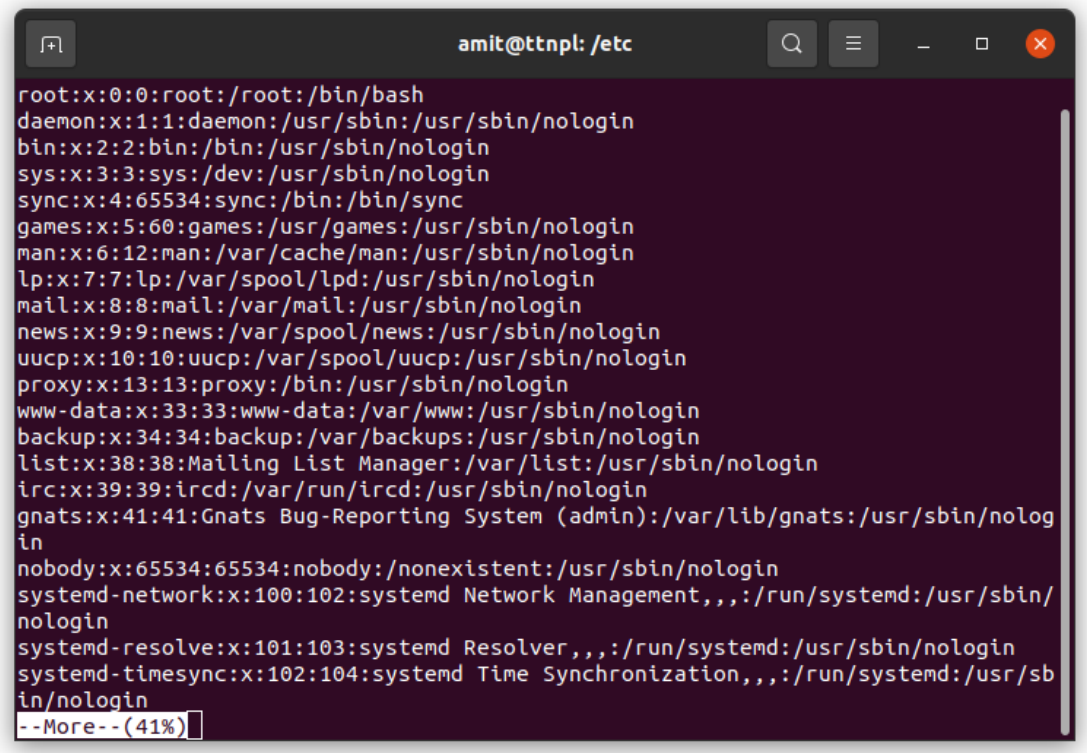
Screenshot (less)

amit@ttnpl:/etc$ less passwd_backup



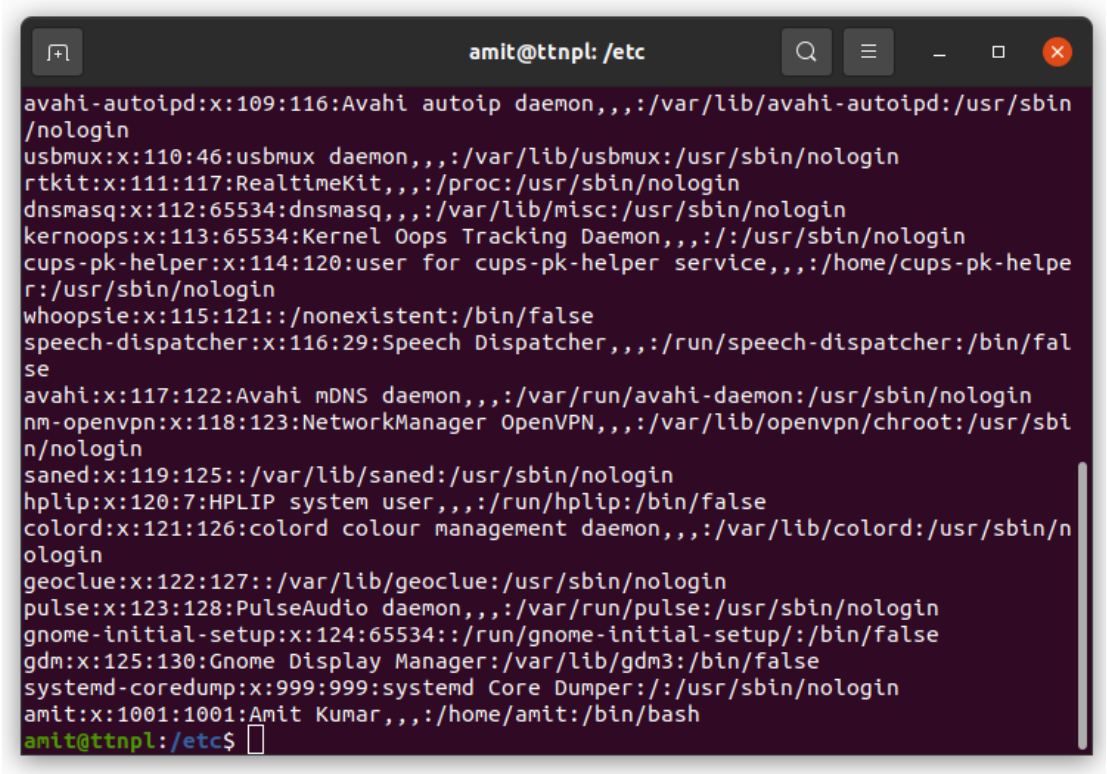
Screenshot (more)

amit@ttnpl:/etc$ more passwd_backup



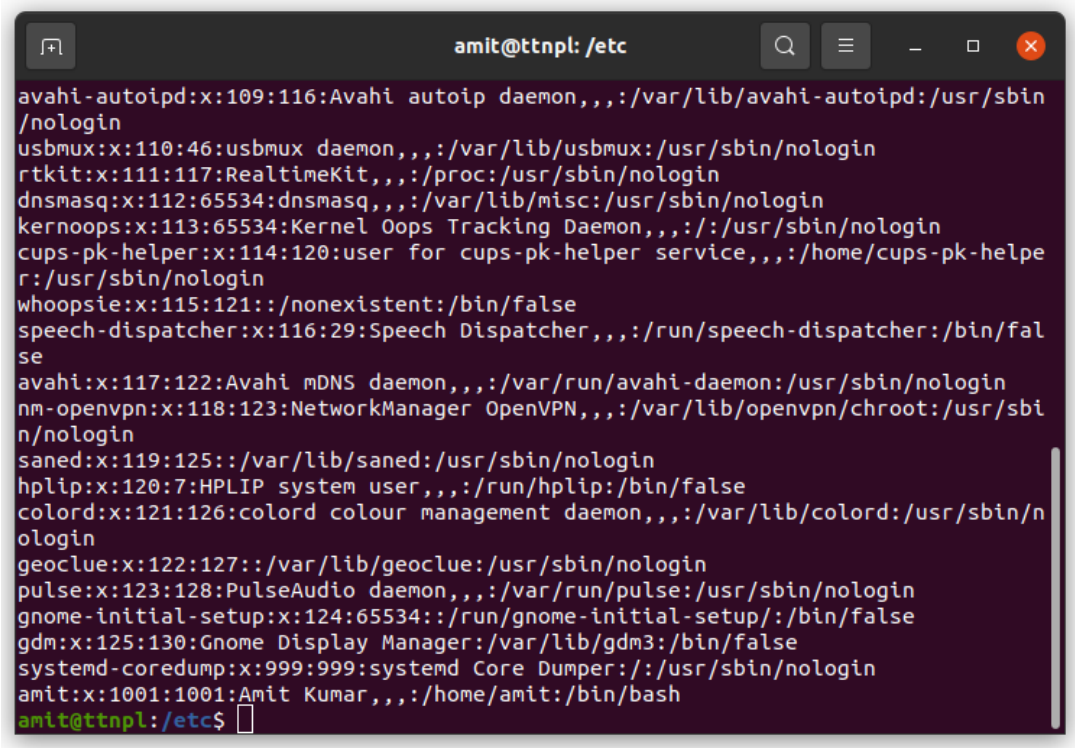
Screenshot (cat)

amit@ttnpl:/etc$ cat passwd_backup



Screenshot (string)

amit@ttnpl:/etc$ strings passwd_backup

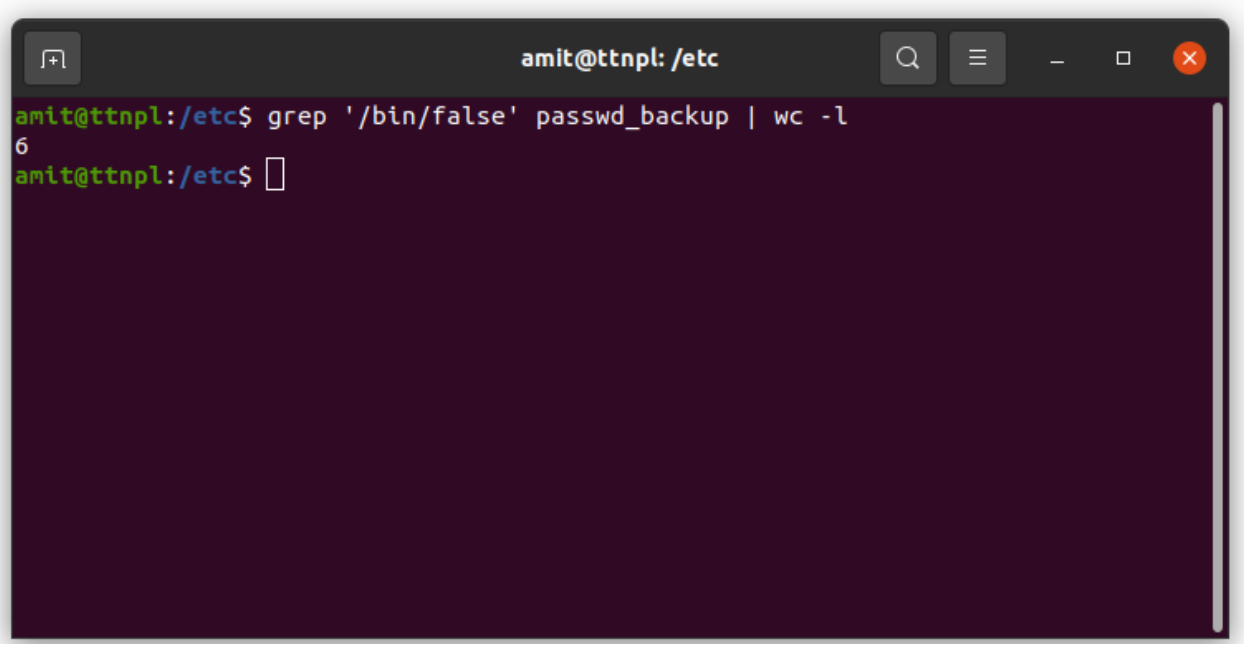


6. Find out the number of line in password_backup containing "/bin/false".

Command

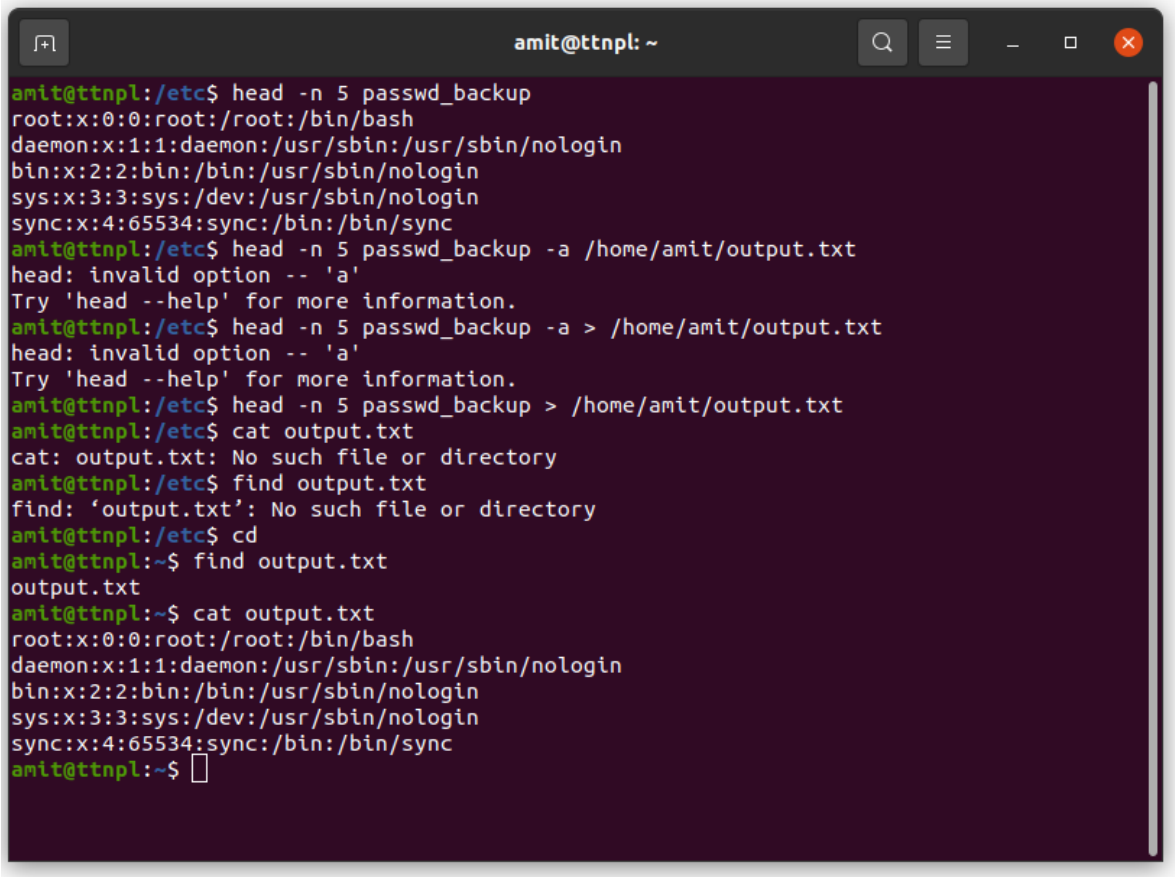
grep ‘/bin/false’ passwd_backup

Output Screenshot



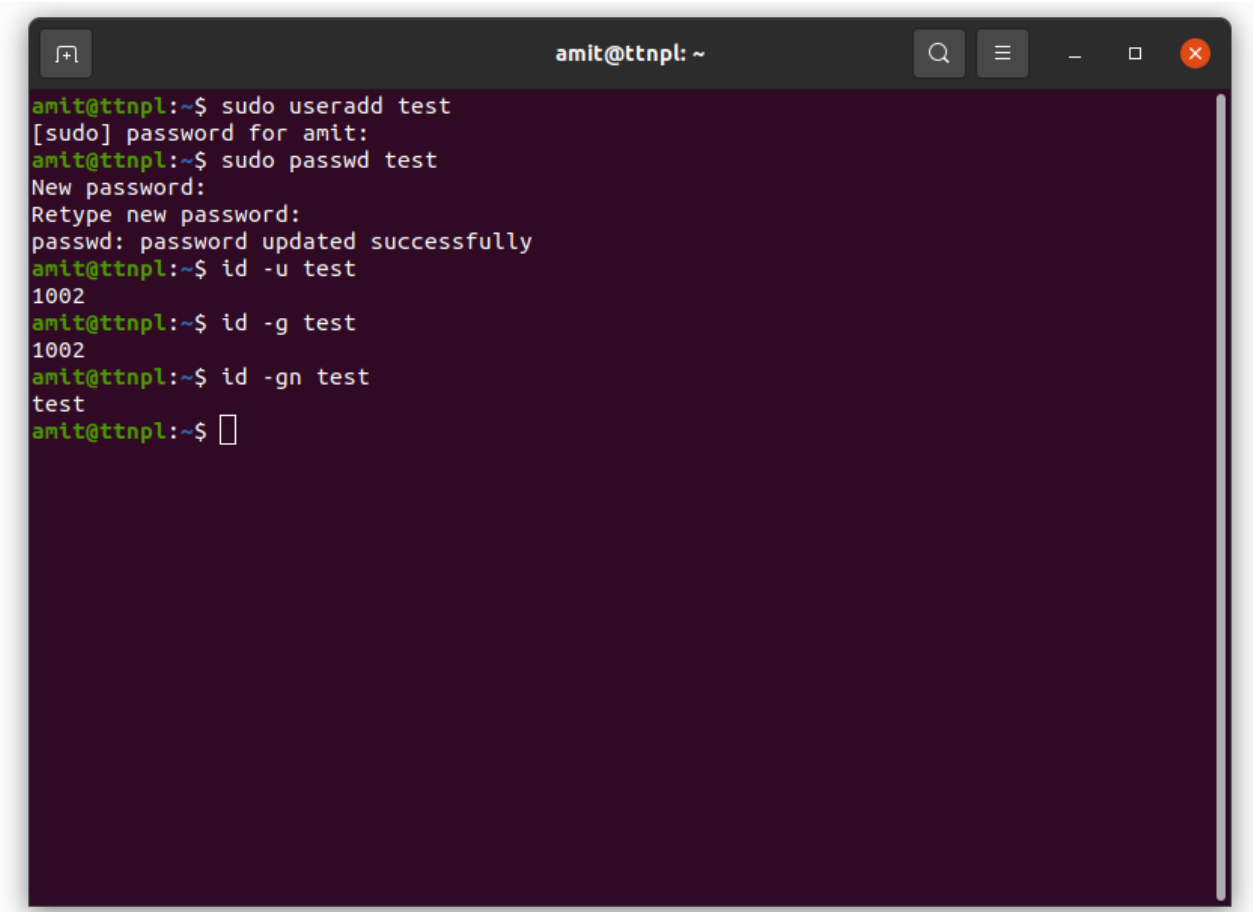
7. Get the first 5 lines of a file “password_backup” and Redirect the output of the above commands into file "output".

Output Screenshot



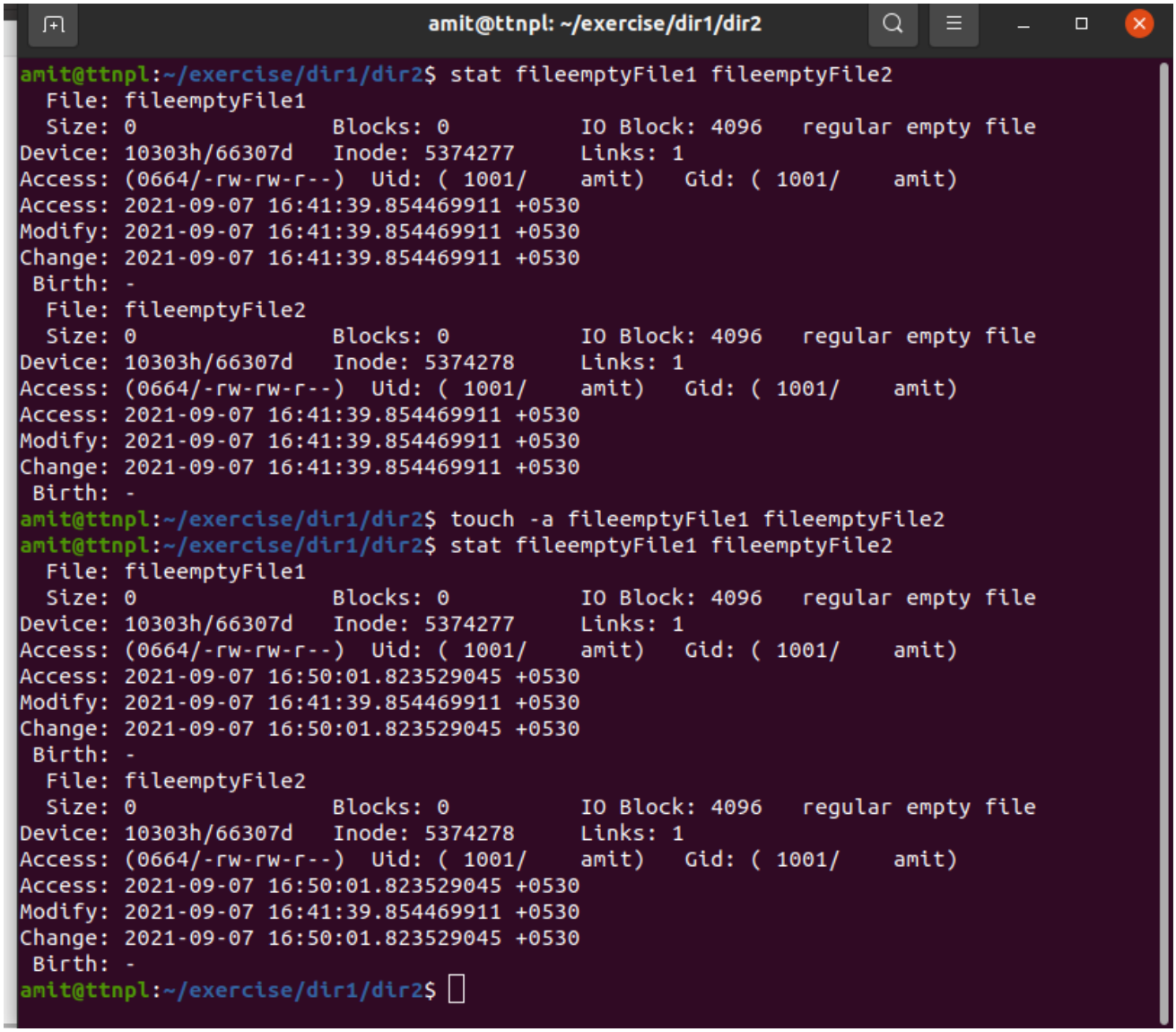
8. Create a "test" user,create its password and find out its uid and gid.

Output Screenshot



9. Change the timestamp of emptyFile1,emptyFile2 which are exist in dir2

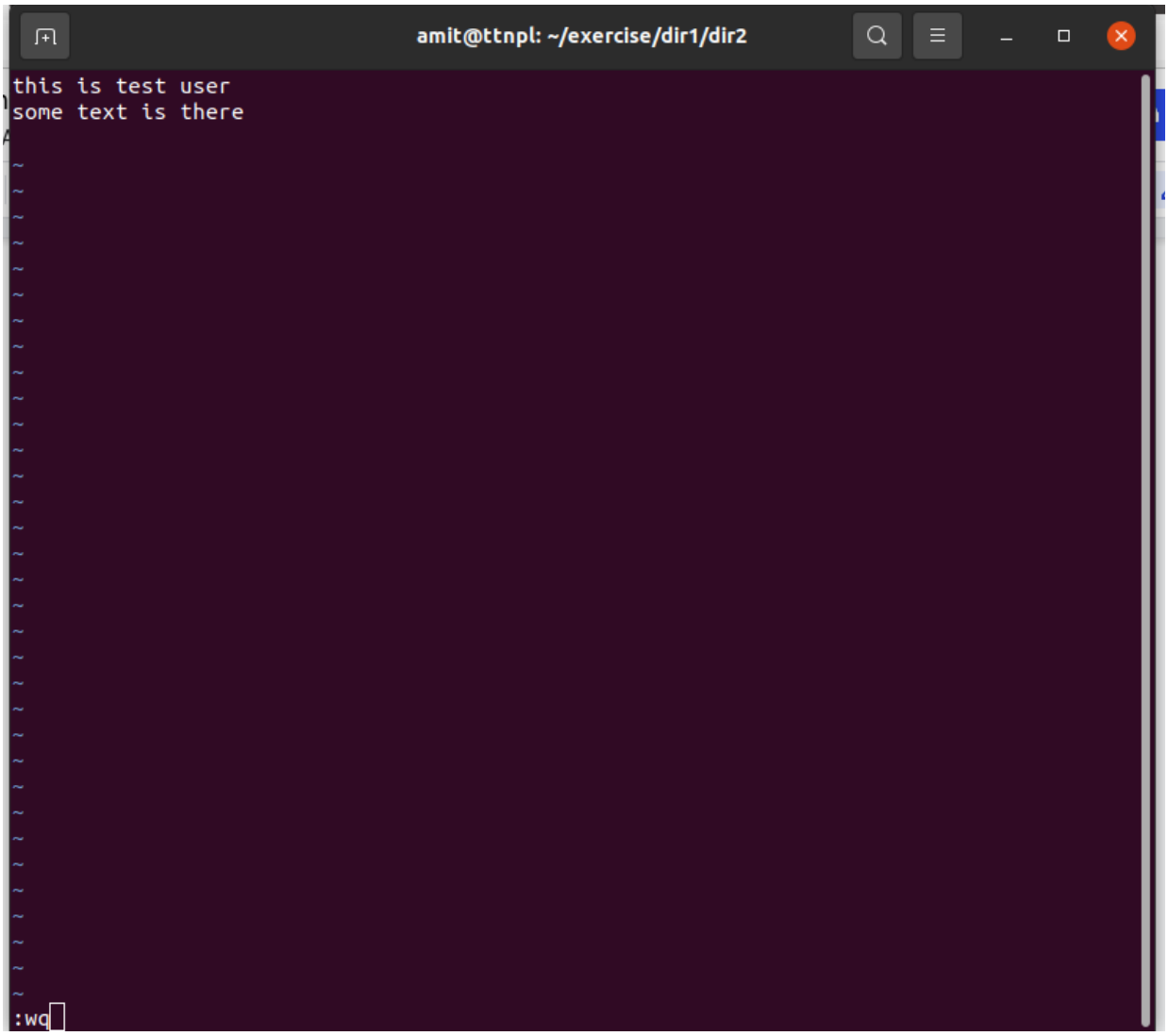
Output Screenshot

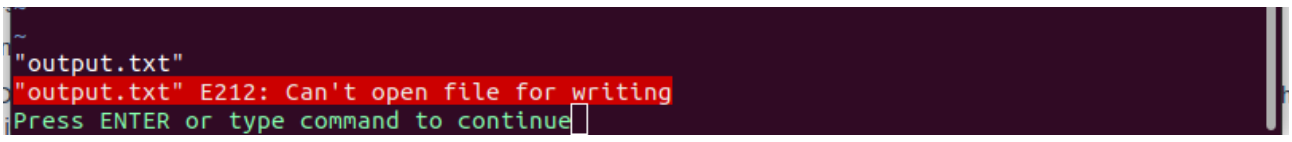


10. Login as test user and edit the "output" file created above. Since the permission wont allow you to save the changes. Configure such that test user can edit it.

1. **Add group owner of the "output" file as the secondary group of testuser and check/change the "output" file permission if it is editable by group. Once done revert the changes**
2. **Make the file editable to the world so that test user can access it. Revert the changes after verification**
3. **Change the ownership to edit the file.**

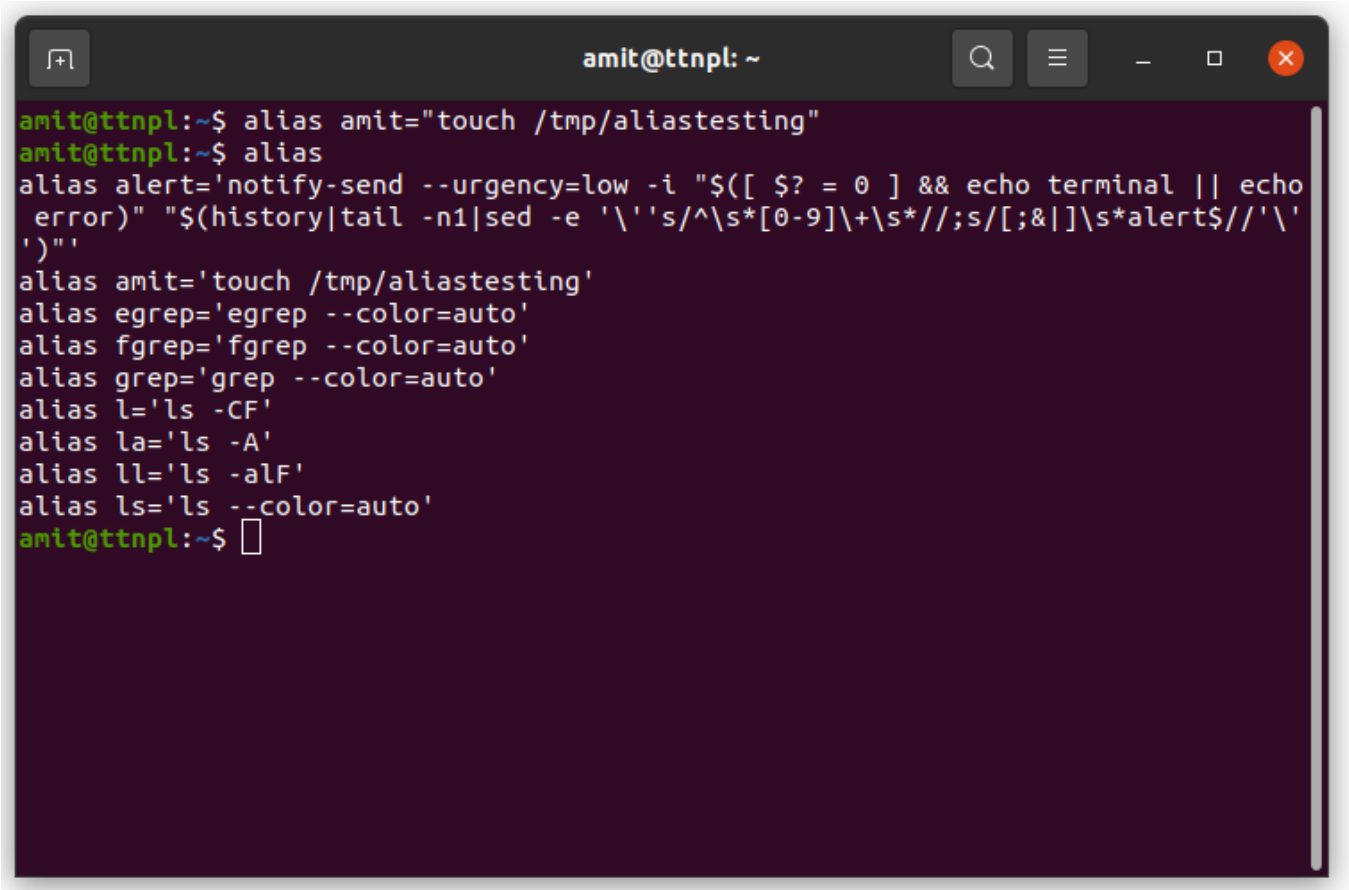
Output Screenshot





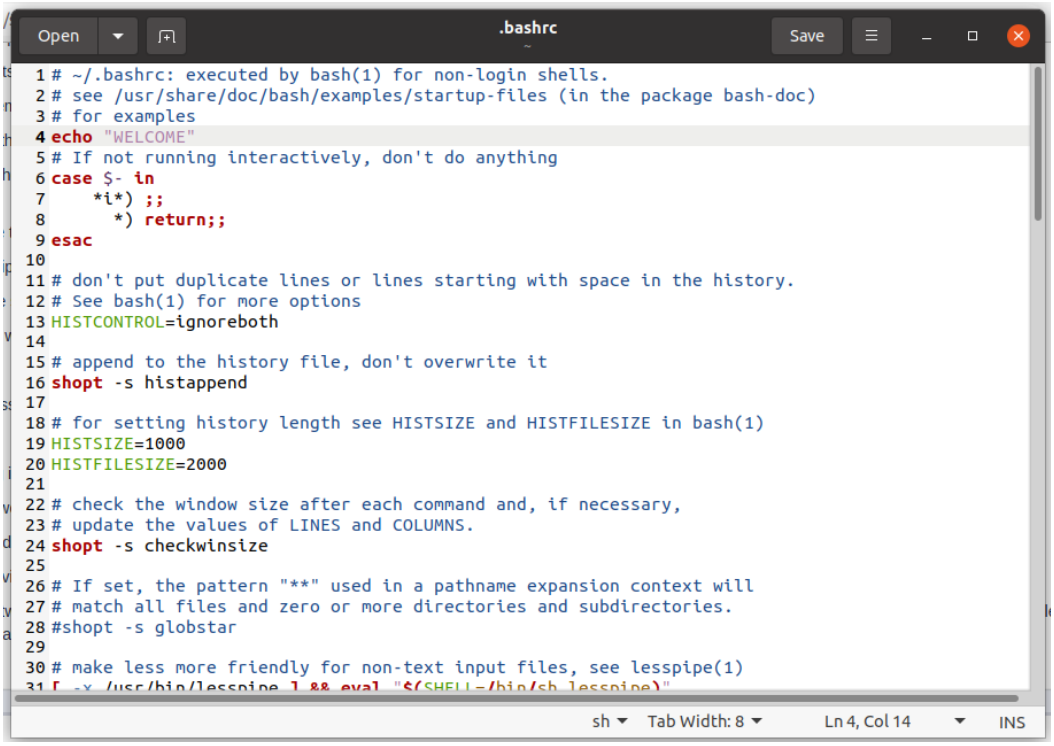
11. Create alias with your name so that it creates a file as "/tmp/aliastesting".

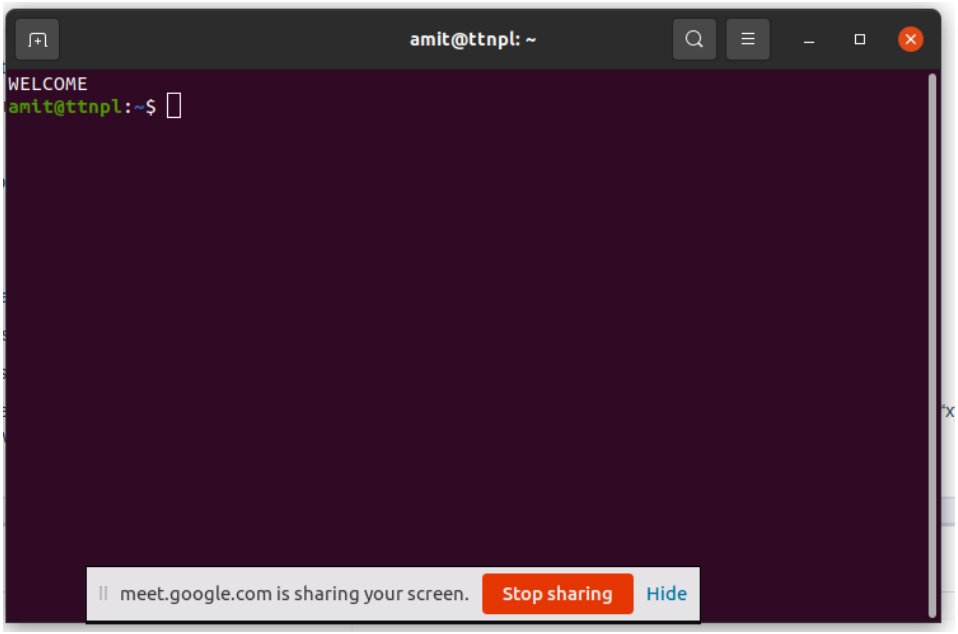
Output Screenshot



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

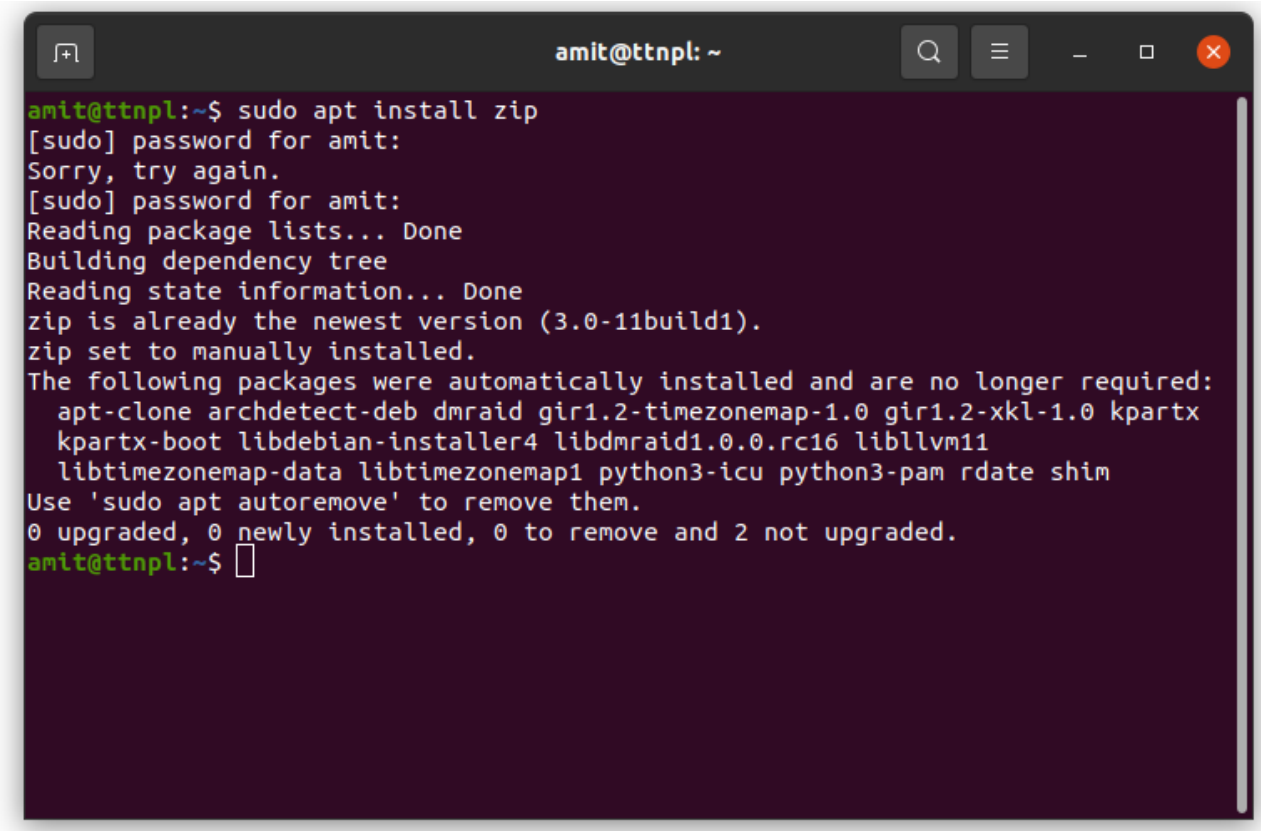
Output Screenshot





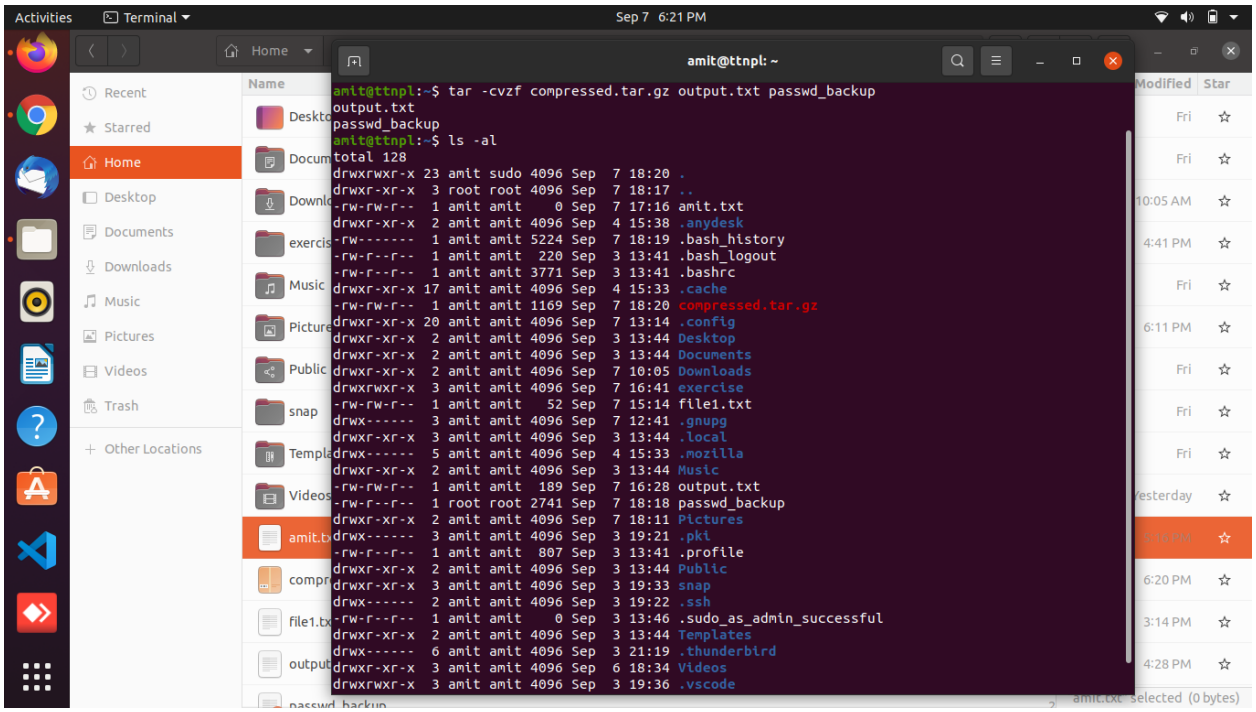
13. Install “zip” package.

Output Screenshot



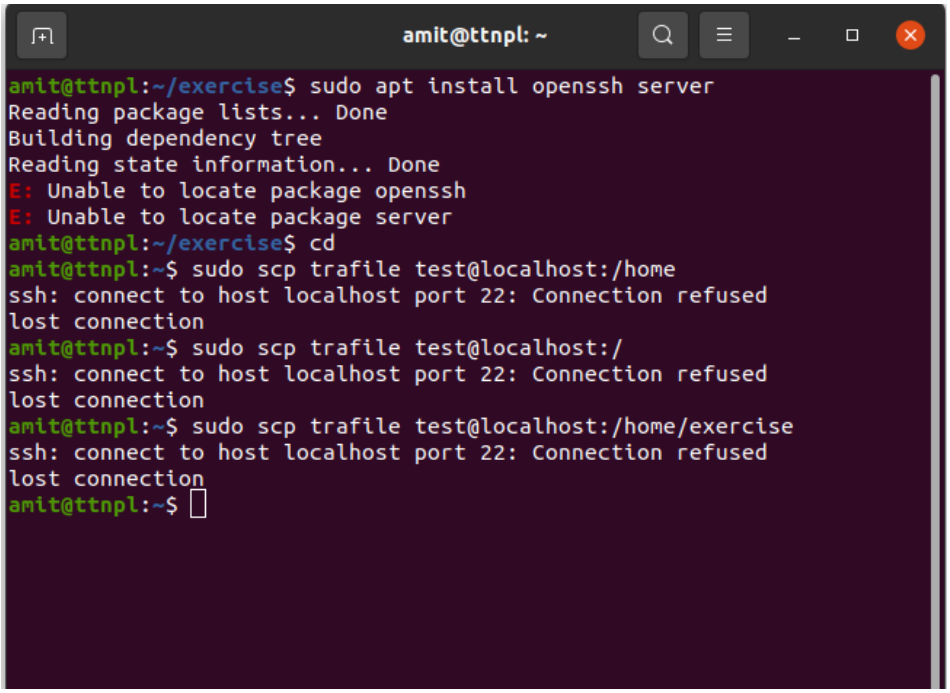
14. Compress "output" and "password_backup" files into a tar ball. List the files present inside the tar created.

Output Screenshot



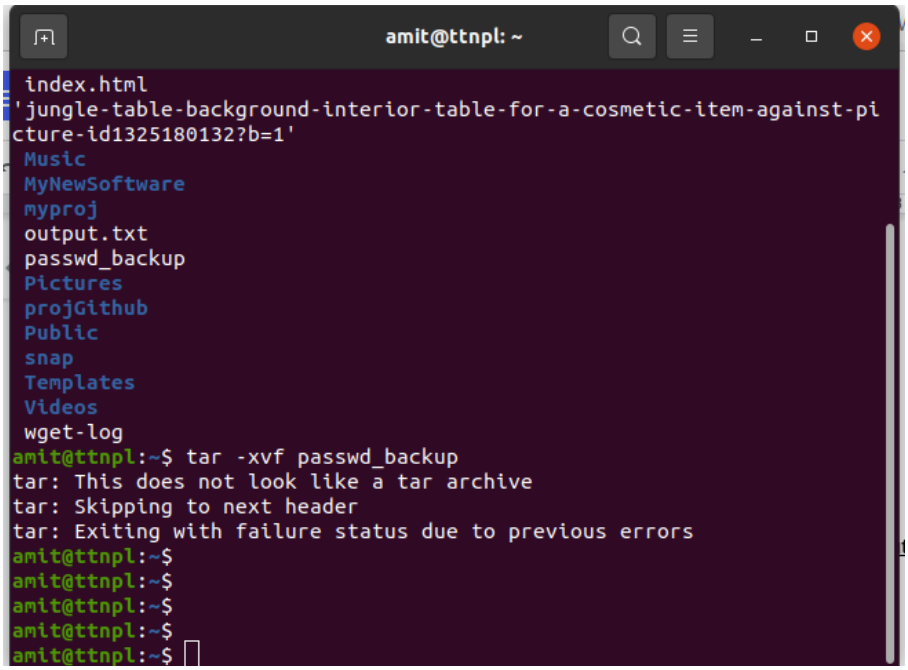
15. scp this file to test user

Output Screenshot



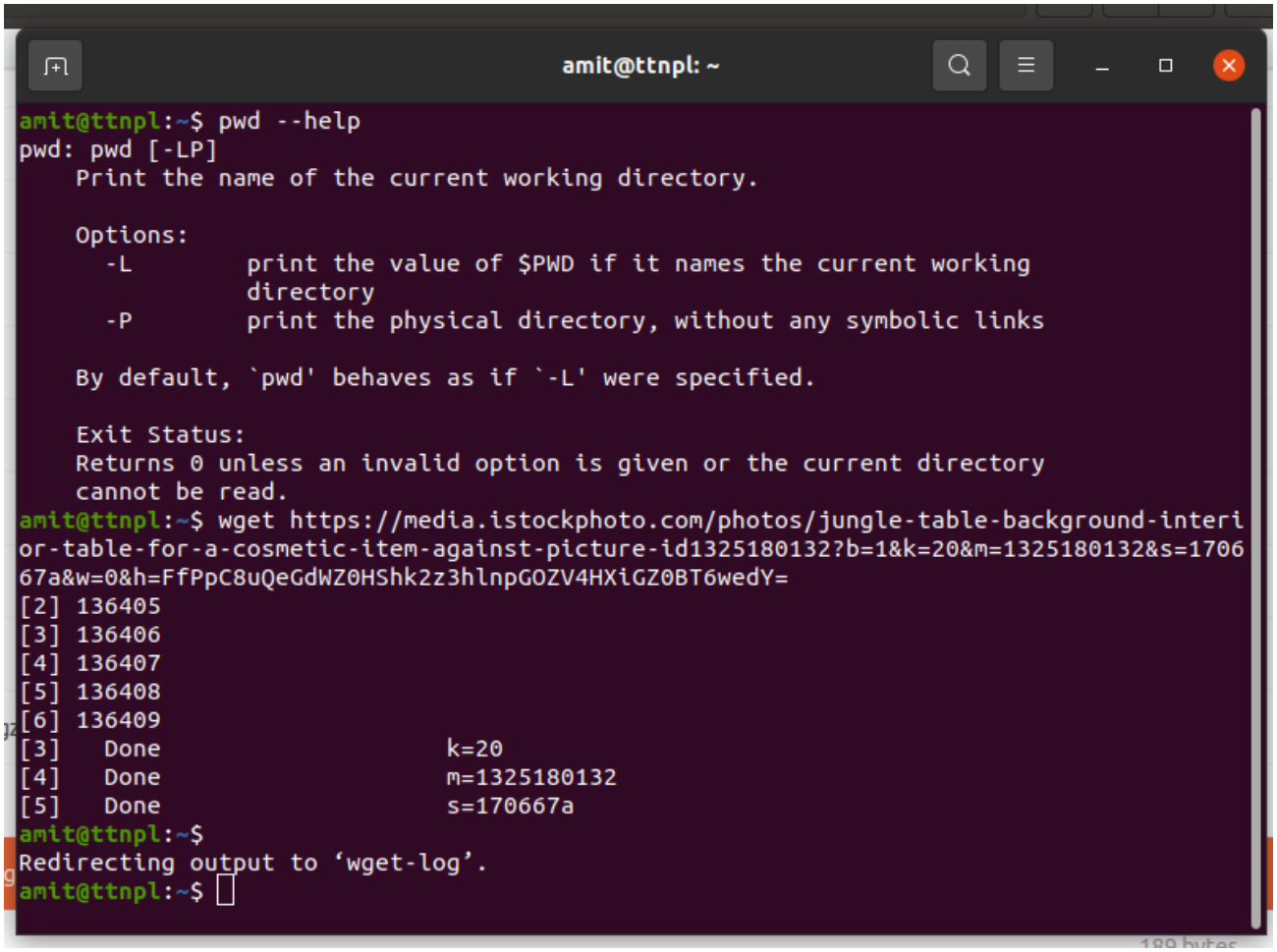
16. Unzip this tar file by logging into the remote server

Output Screenshot



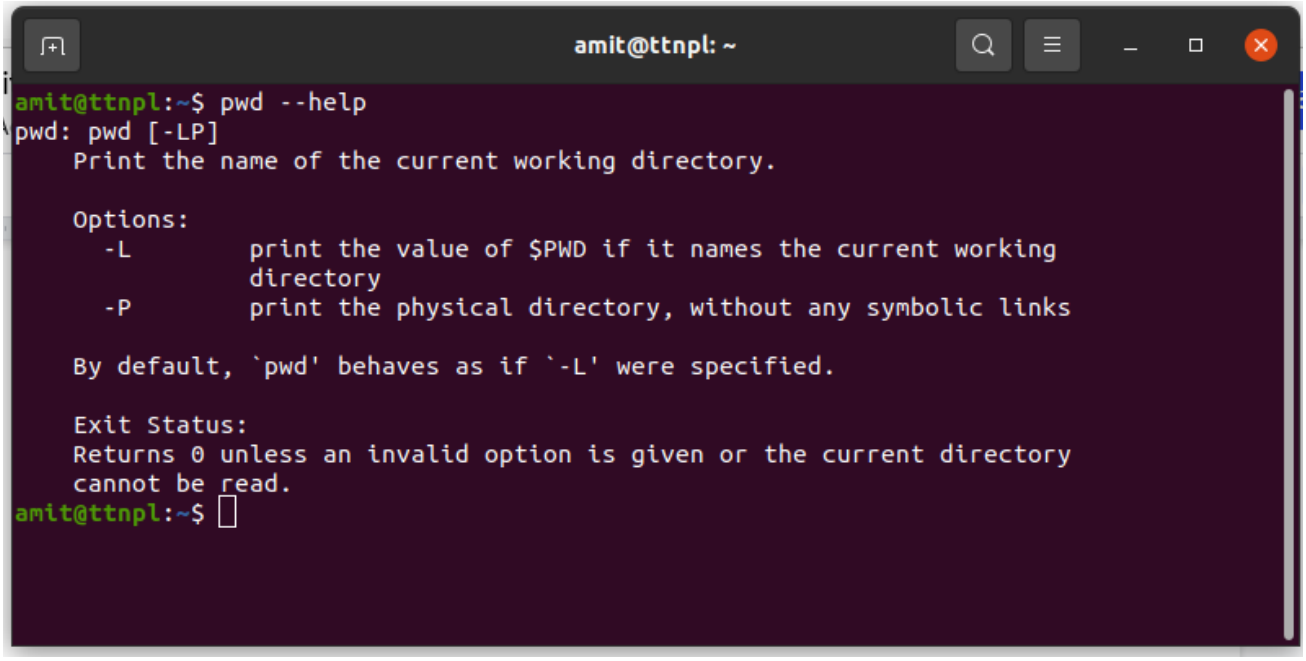
17. Download any image from web and move to desktop

Output Screenshot



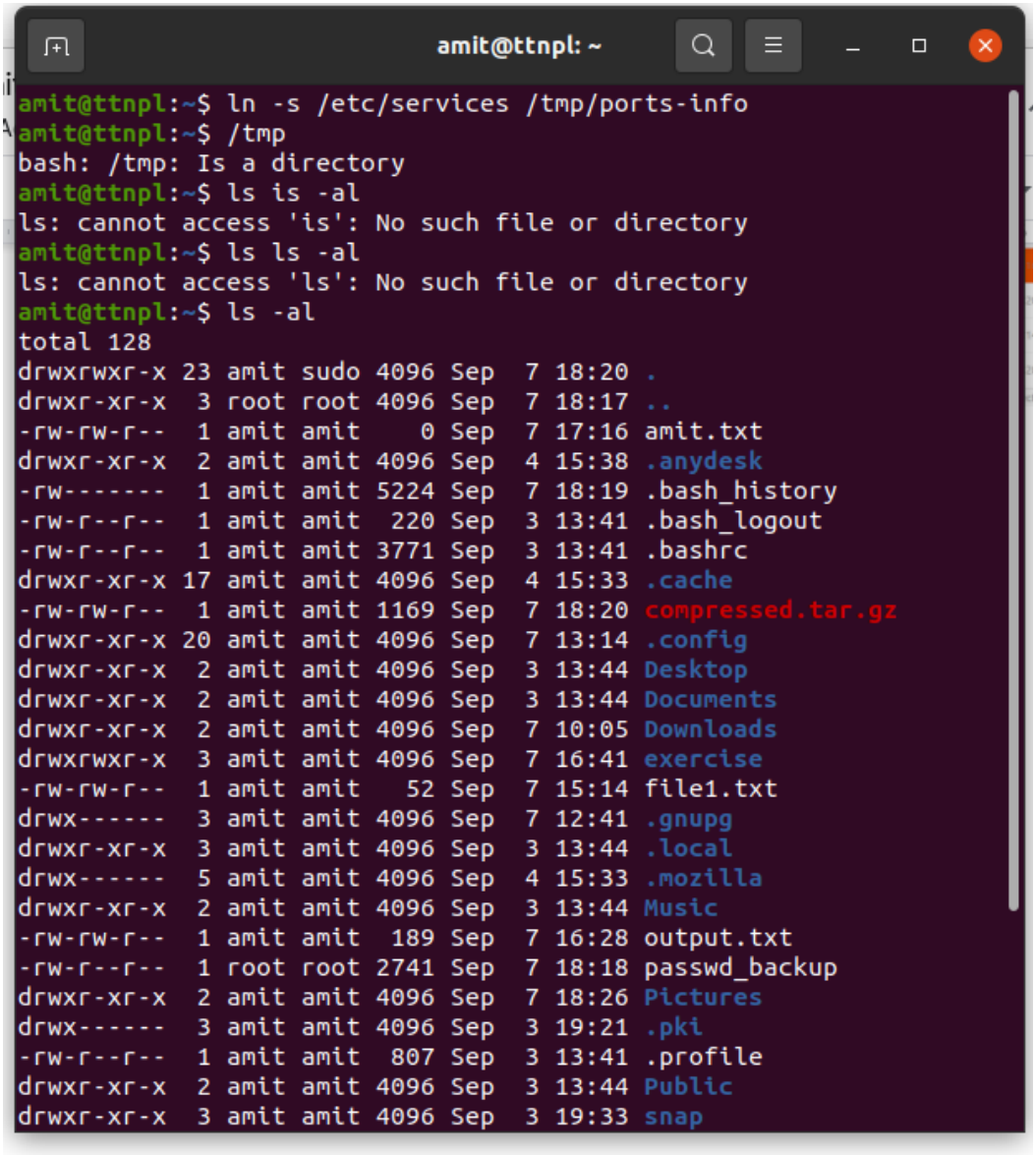
18. How to get help of commands usages.

Output Screenshot



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

Output Screenshot



20. You are appointed as a Software/DevOps 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?

Output Screenshot