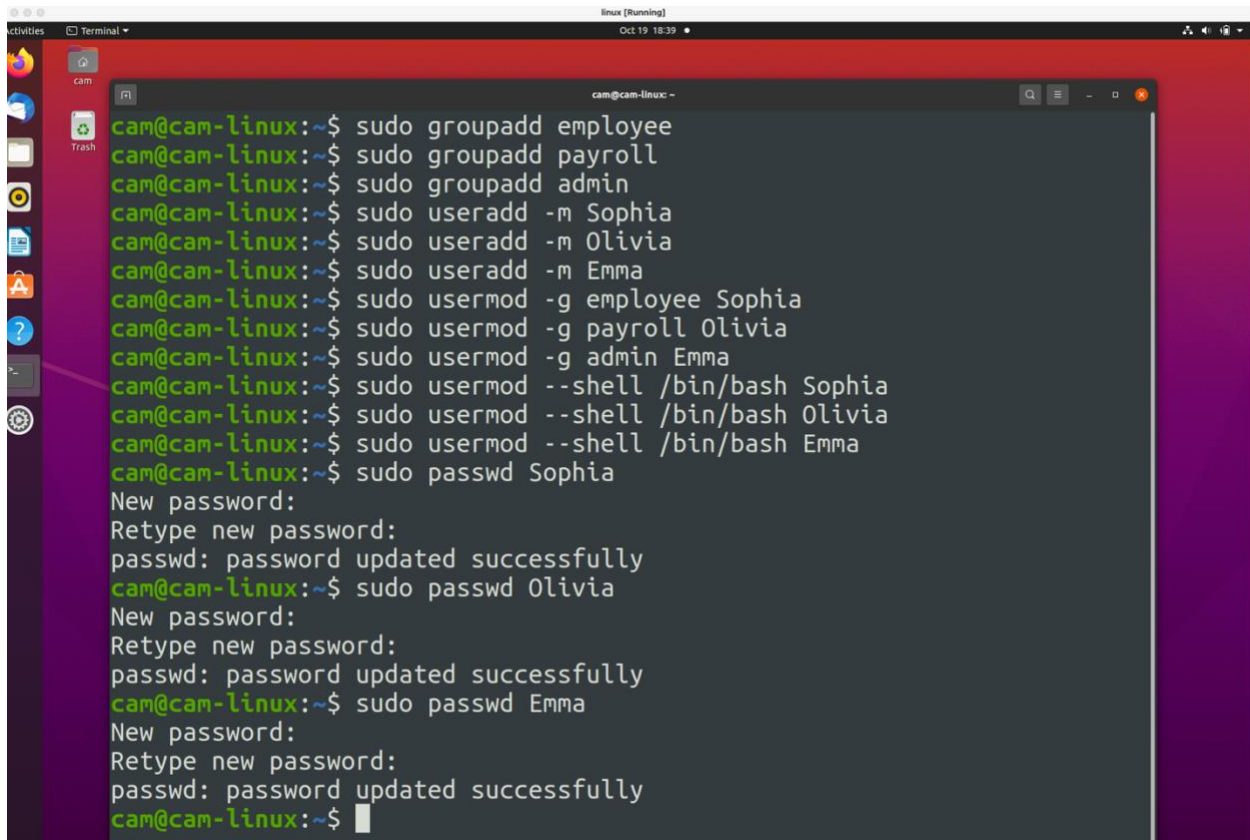OLD DOMINION UNIVERSITY

CYSE 270 LINUX SYSTEM FOR CYBERSECURITY

Assignment #6 File Permission

Cameron Cassani
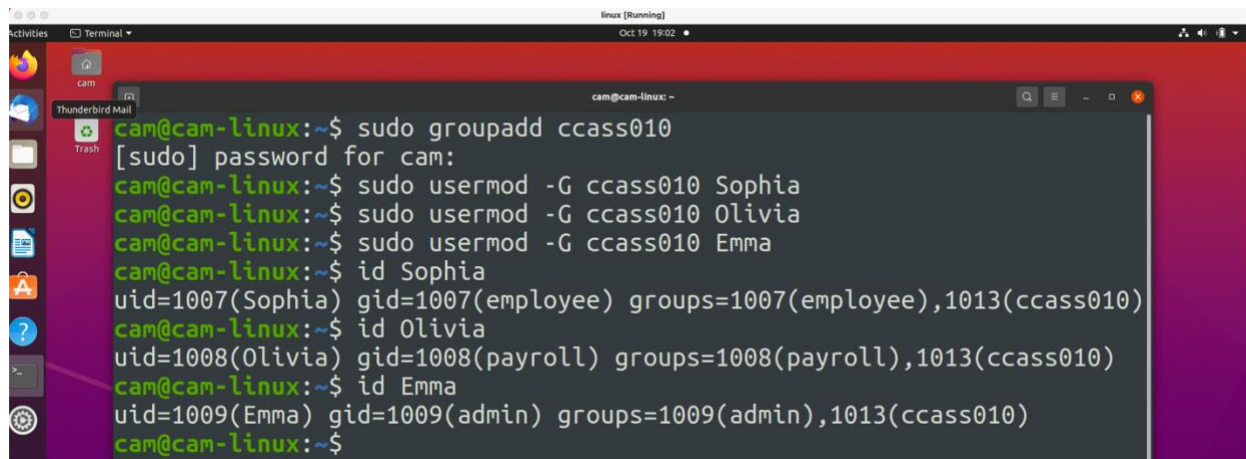01177215
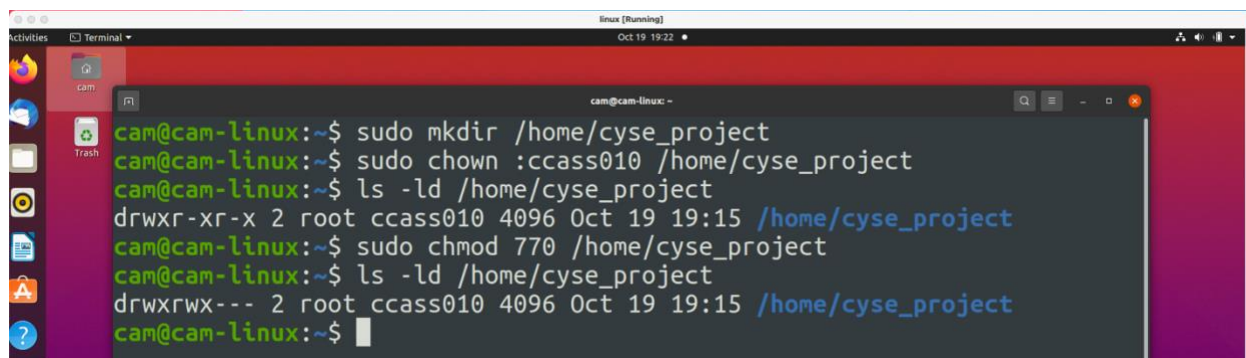
TASK A

Explanation (Step 1 & 2)

- I use "sudo groupadd xxxxx" and replace xxxxx with employee, payroll, and admin to create three groups with the respective names.
- I use "sudo useradd -m xxxxx" and replace xxxxx with Sophia, Olivia, and Emma to create three users accounts with a specified home directory.
- I use "sudo usermod –shell xxxxx" and replace xxxxx with the Sophia, Olivia and Emma to change their login shells to /bin/bash.
- I use "sudo passwd xxxxx" and replace xxxxx with the Sophia, Olivia and Emma to set a password for each user.
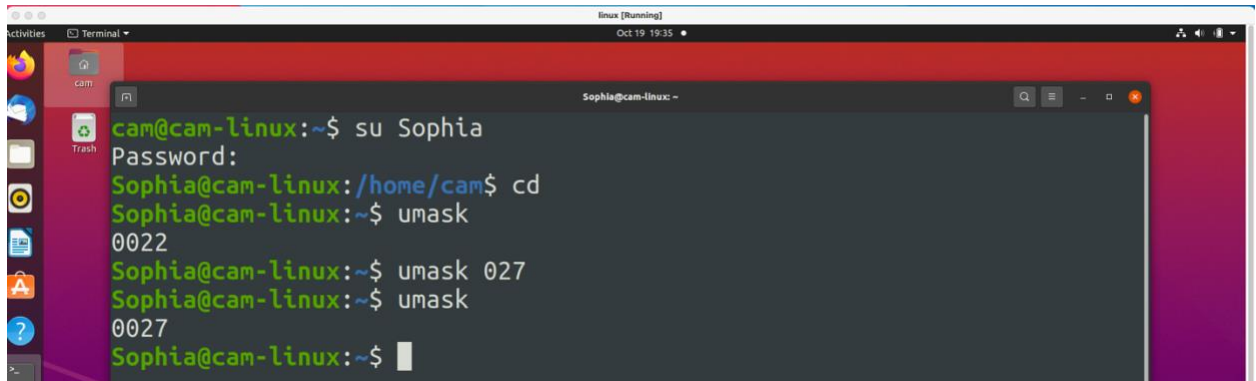
Explanation (Step 3)

- I use "sudo groupadd ccass010" to create a group with my midas id.
- I use "sudo usermod -G ccass010 xxxxx" and replace xxxxx with Sophia, Olivia and Emma to add the ccass010 group as the secondary group for those users.
- I use "id xxxxx" and replace xxxxx with Sophia, Olivia, and Emma to check each user's group profile.

Explanation (Step 4 & 5)

- I use "sudo mkdir /home/cyse_project" to create the directory /home/cyse_project.
- I use "sudo chown ccass010 /home/cyse_project" to assign ccass010 as the owner of the cyse_project directory.
- I use "ls -ld /home/cyse_project" to check the permission of cyse_project.
- I use "sudo chmod 770 /home/cyse_project" to change the permissions of the cyse_project direcotyr so that only project group members have access to this directory.
- I use "ls -ld /home/cyse_project" to check the permissions of cyse_project.
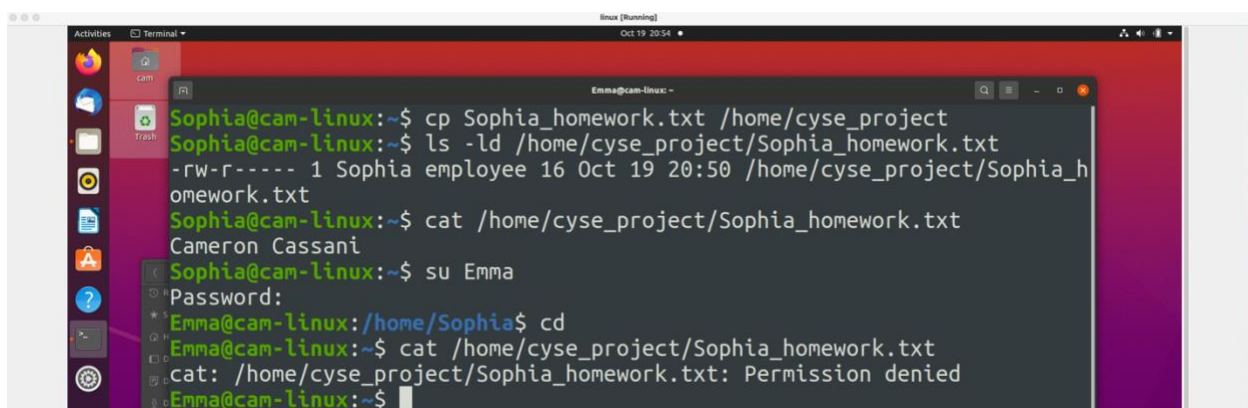
Explanation (Step 6)

- I use "su Sophia" to switch to Sophia's account.
- I use "umask 027" to change the permissions for Sophia to -rw-r-----.
- I use "umask" to check the permissions of Sophia

Explanation (Step 7)

- I use "sudo echo "Cameron Cassani" > Sophia_homework.txt" to create a new file called Sophia_homework in the home directory. This file also includes my name ("Cameron Cassani") in the first line.
- I use "ls -ld Sophia_homework.txt" to check the permissions of the file.

Explanation (Step 8 & 9)

- I use "sudo cp Sophia_homework.txt /home/cyse_project/Sophia_homework.txt" to copy Sophia_homework to the /home/cyse_project directory.

- I use "ls -ld /home/cyse_project/Sophia_homework.txt" to check the permissions of the document.
- I use "cat /home/cyse_project/Sophia_homework.txt" with Sophia's account to make sure that user can read it.
- I use "su Emma" to switch to Emma's account
- I use "cat /home/cyse_project/Sophia_homework.txt" with Emma's account to make sure the user can't read it.

TASK B

Explanation (Step 1)

- I use "su –" to switch to the root account.
- I use "chmod 2744 /home/cyse_project/Sophia_homework.txt" to disallow group members to access the Sophia_homework file

Explanation (Step 2 & 3)

- I use "su Sophia" to switch to Sophia's account.
- I use "cp /home/cyse_project/Sophia_homework.txt /home/cyse_project/Sophia_homework2.txt" to copy Sophia"homework.txt to the /home/cyse/project directory as Sophia_homework2.txt
- I use "su Emma" to switch to Emma's account.
- I use "cat /home/cyse_project/Sophia_homework2.txt" to read the Sophia_homework2.txt file.

TASK C

Explanation (Step 1 & 2 & 3)

- I use "su –" to switch to the root account.
- I use "chmod 0700 /home/cyse_project/Sophia_homework.txt" to disallow group members to access the Sophia_homework file.
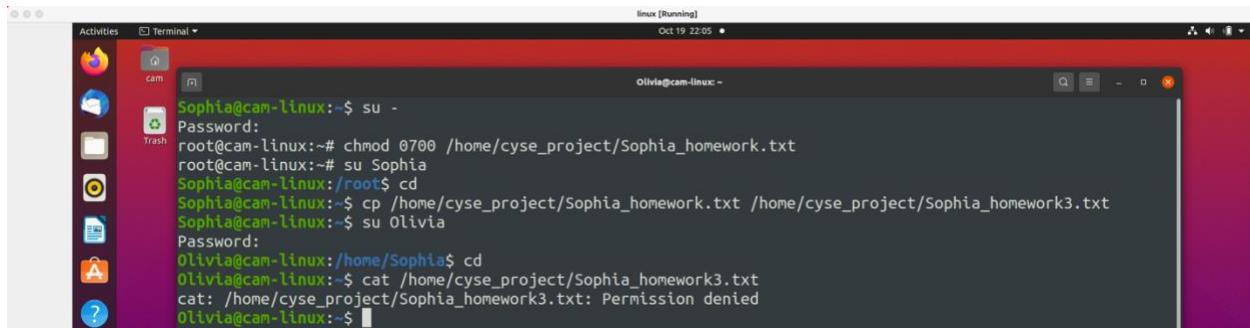- I use "su Sophia" to switch to Sophia's account.
- I use "cp /home/cyse_project/Sophia_homework.txt /home/cyse_project/Sophia_homework3.txt" to copy Sophia"homework.txt to the /home/cyse/project directory as Sophia_homework3.txt
- I use "su Olivia" to switch to Olivia's account.
- I use "cat /home/cyse_project/Sophia_homework3.txt" to test to see if Olivia can read the file. (Olivia's account can not).