

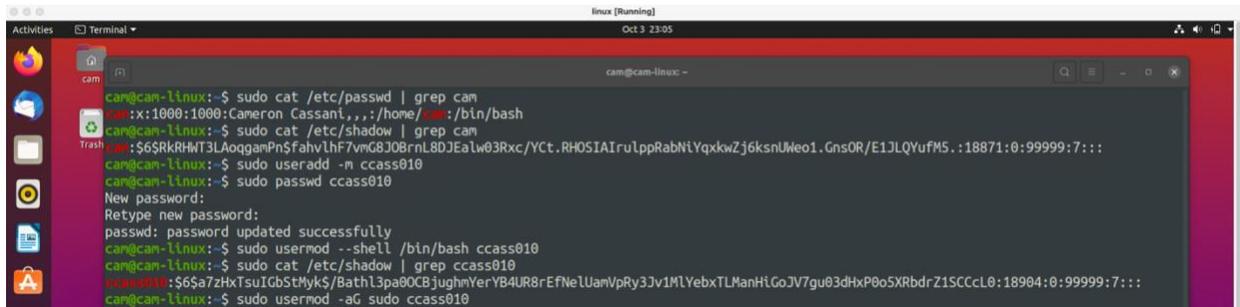
OLD DOMINION UNIVERSITY

CYSE 270 LINUX SYSTEM FOR CYBERSECURITY

Assignment #4 Group and User Accounts

Cameron Cassani
01177215

TASK A



```
cam@cam-linux:~$ sudo cat /etc/passwd | grep cam
cam:x:1000:1000:Cameron Cassani,,,:/home/cam:/bin/bash
cam@cam-linux:~$ sudo cat /etc/shadow | grep cam
cam:$6$RkRHMT3LAoqgamPn$FahvLhF7vmG8J08rnl.8DJEalw03Rxc/YCt.RHOSIAIruLppRabNlYqxkwZj6ksnUWoe1.GnsOR/E1JLQYufMS.:18871:0:99999:7:::
cam@cam-linux:~$ sudo useradd -m ccase010
cam@cam-linux:~$ sudo passwd ccase010
New password:
Retype new password:
passwd: password updated successfully
cam@cam-linux:~$ sudo usermod --shell /bin/bash ccase010
cam@cam-linux:~$ sudo cat /etc/shadow | grep ccase010
ccase010:$6$a7zHxTsuIGbStMykS/BathL3pa00CBjughmYerYB4UR8rEfNeLUamVpRy3Jv1MlyebxTLManHiGoJV7gu03dHxP8o5XRbdrZ1SCCcl0:18904:0:99999:7:::
cam@cam-linux:~$ sudo usermod -aG sudo ccase010
```

Explanation

- Step 1 - I opened the terminal window.
- Step 2 - I use “sudo cat /etc/passwd | grep cam” to display user account information (including the login shell and home directory) for the current user using grep.
- Step 3 – I use “sudo cat /etc/shadow | grep cam” to display user password information (including the encrypted password and password aging) for the current user using grep.
- Step 4 – I use “sudo useradd -m ccase010” to create a new user named ccase010 and explicitly use options to create the home directory /home/ccase010 for this user.
- Step 5 - I use “sudo passwd ccase010” to set a password for the new user.
- Step 6 – I use “sudo usermod –shell /bin/bash ccase010” to set bash shell as the default login shell for the new user ccase010
- Step 7 – I use “sudo cat /etc/shadow | grep ccase010” to execute the correct command to display user password information (including the encrypted password and password aging) for the new user ccase010 using grep.
- Step 8. – I use “sudo usermod -aG sudo ccase010” to add the new user ccase010 to sudo group without overriding the existing group membership.

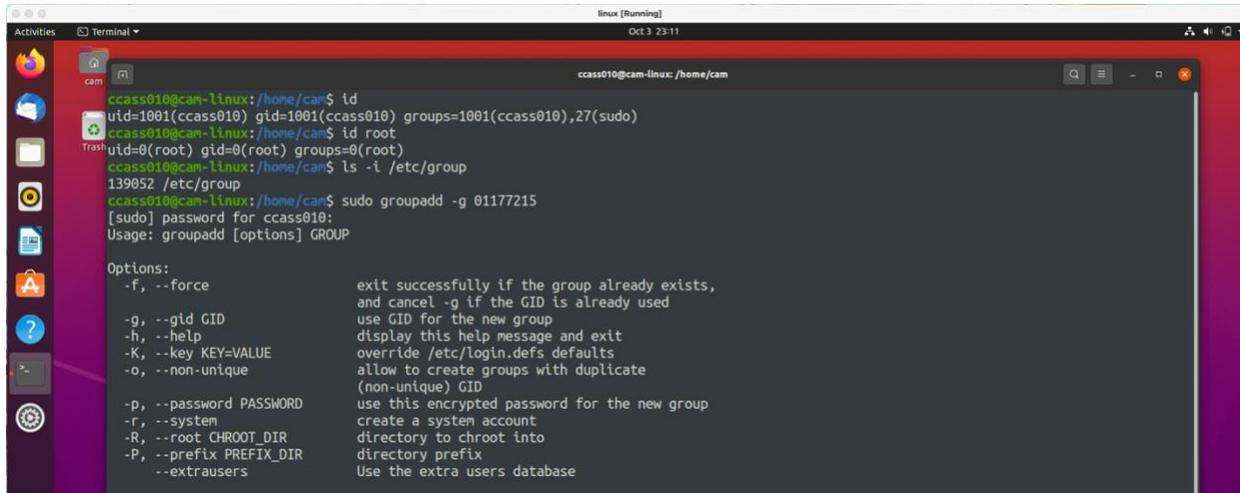


```
cam@cam-linux:~$ su ccase010
Password:
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
ccase010@cam-linux:~/cam$
```

Explanation

- Step 9 – I use “su ccase010” to switch to the new user’s account.

TASK B

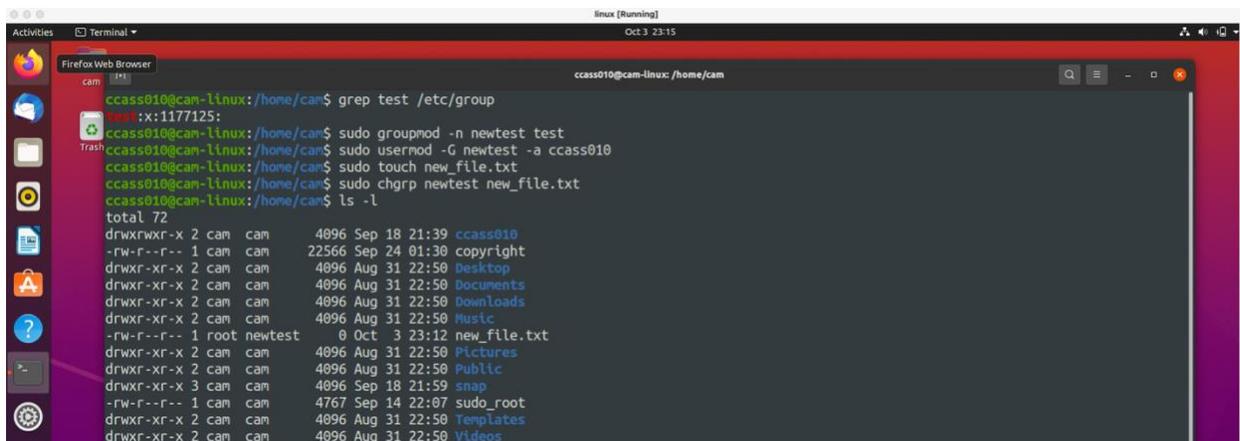


```
ccass010@cam-linux: /home/cam$ id
uid=1001(ccass010) gid=1001(ccass010) groups=1001(ccass010),27(sudo)
ccass010@cam-linux: /home/cam$ id root
uid=0(root) gid=0(root) groups=0(root)
ccass010@cam-linux: /home/cam$ ls -l /etc/group
-rw-rw-r-- 1 root root 139052 /etc/group
ccass010@cam-linux: /home/cam$ sudo groupadd -g 01177215
[sudo] password for ccass010:
Usage: groupadd [options] GROUP

Options:
-f, --force                exit successfully if the group already exists,
                           and cancel -g if the GID is already used
-g, --gid GID             use GID for the new group
-h, --help                display this help message and exit
-K, --key KEY=VALUE       override /etc/login.defs defaults
-o, --non-unique           allow to create groups with duplicate
                           (non-unique) GID
-p, --password PASSWORD  use this encrypted password for the new group
-r, --system              create a system account
-R, --root CHROOT_DIR     directory to chroot into
-P, --prefix PREFIX_DIR  directory prefix
--extrausers              Use the extra users database
```

Explanation

- Step 1 - I open the terminal window with ccass010
- Step 2 – I use “id” to display the current user’s ID and group membership.
- Step 3 – I use “id root” to display the group membership of the root account.
- Step 4 – I use “ls -l /etc/group” to determine the user owner and group owner of the /etc/group file.
- Step 5 – I use “sudo groupadd -g 01177215” to create a new group named test and use my UIN as the GID.



```
ccass010@cam-linux: /home/cam$ grep test /etc/group
test:x:1177125:
ccass010@cam-linux: /home/cam$ sudo groupmod -n newtest test
ccass010@cam-linux: /home/cam$ sudo usermod -G newtest -a ccass010
ccass010@cam-linux: /home/cam$ sudo touch new_file.txt
ccass010@cam-linux: /home/cam$ sudo chgrp newtest new_file.txt
ccass010@cam-linux: /home/cam$ ls -l
total 72
drwxrwxr-x 2 cam cam 4096 Sep 18 21:39 ccass010
-rw-r--r-- 1 cam cam 22566 Sep 24 01:30 copyright
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Desktop
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Documents
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Downloads
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Music
-rw-r--r-- 1 root newtest 0 Oct 3 23:12 new_file.txt
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Pictures
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Public
drwxr-xr-x 3 cam cam 4096 Sep 18 21:59 snap
-rw-r--r-- 1 cam cam 4767 Sep 14 22:07 sudo_root
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Templates
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Videos
```

Explanation

- Step 6 – I use “grep test /etc/group” to display the group account information for the test group using grep.

- Step 7 – I use “sudo groupmod -n newtest test” to change the group name of the test group to newtest.
- Step 8 – I use “sudo usermod -G newtest -a ccast010” to add the current account (ccass010) as a secondary member of the newtest group without overriding this user’s current group membership.
- Step 9 – I use “sudo touch new_file.txt” to create a new file in the account’s home directory, I then use “sudo chgrp newtest new_file.txt” to change the group owner to newtest.
- Step 10 – I use “ls -l” to display the user owner and group owner information.

```

ccass010@cam-linux: /home/cam$ sudo groupdel newtest
ccass010@cam-linux: /home/cam$ ls -l
total 72
drwxrwxr-x 2 cam cam 4096 Sep 18 21:39 ccast010
-rw-r--r-- 1 cam cam 22566 Sep 24 01:30 copyright
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Desktop
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Documents
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Downloads
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Music
-rw-r--r-- 1 root 1177125 0 Oct 3 23:12 new_file.txt
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Pictures
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Public
drwxr-xr-x 3 cam cam 4096 Sep 18 21:59 snap
-rw-r--r-- 1 cam cam 4767 Sep 14 22:07 sudo_root
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Templates
drwxr-xr-x 2 cam cam 4096 Aug 31 22:50 Videos
ccass010@cam-linux: /home/cam$

```

Explanation

- Step 11 – I use “sudo groupdel newtest” to delete the newtest group, then repeat the previous step by using “ls -l”.

```

cam@cam-linux:~$ sudo userdel -r ccast010
[sudo] password for cam:
userdel: ccast010 mail spool (/var/mail/ccass010) not found
cam@cam-linux:~$

```

Explanation

- Step 12 – I use “sudo userdel -r ccast010 to delete the user ccast010 along with the home directory using a single command.