

Task A – User Account management (8 * 5 = 40 points)

1. Open a terminal window in VM and execute the correct command to display user account information (including the login shell and home directory) for the current user using grep.

```
File Actions Edit View Help
(brandon@PearsonKali)-[~]
$ grep brandon /etc/passwd
brandon:x:1000:1000:Brandon Pearson,,,:/home/brandon:/usr/bin/zsh
```

2. Execute the correct command to display user password information (including the encrypted password and password aging) for the current user using grep.

```
(brandon@PearsonKali)-[~]
$ sudo grep brandon /etc/shadow
[sudo] password for brandon:
brandon:$y$j9T$c6e/B6CDvg//C4CHpsHiC0$.XbIIGzzgCgr5kMLBXTeULpH3dppxow8iJzPIOLJwx/:19369:0:99999:7
:::
```

3. Create a new user named xxxxx and explicitly use options to create the home directory /home/xxxxx for this user.

```
(brandon@PearsonKali)-[~]
$ sudo useradd -m Bpear003
```

4. Set a password for the new user.

```
(brandon@PearsonKali)-[~]
$ sudo passwd Bpear003
New password:
Retype new password:
passwd: password updated successfully
```

5. Set bash shell as the default login shell for the new user xxxxx, then verify the change.

```
(brandon@PearsonKali)-[~]
└─$ grep Bpear003 /etc/passwd
Bpear003:x:1003:1003::/home/Bpear003:/bin/sh

(brandon@PearsonKali)-[~]
└─$ usermod -s /bin/bash Bpear003
usermod: Permission denied.
usermod: cannot lock /etc/passwd; try again later.

(brandon@PearsonKali)-[~]
└─$ sudo grep Bpear003 /etc/passwd
Bpear003:x:1003:1003::/home/Bpear003:/bin/sh

(brandon@PearsonKali)-[~]
└─$ sudo usermod -s /bin/bash Bpear003

(brandon@PearsonKali)-[~]
└─$ grep Bpear003 /etc/passwd
Bpear003:x:1003:1003::/home/Bpear003:/bin/bash

(brandon@PearsonKali)-[~]
└─$ █
```

6. Execute the correct command to display user password information (including the encrypted

```
(brandon@PearsonKali)-[~]
└─$ sudo grep Bpear003 /etc/shadow
Bpear003:$y$j9T$2GSslaz.41cSGv7mRlNg..$8DE7QscZ7sLg2KK7ZHwaxJbXszYTks.GmNW03XvkKNB:19395:0:99999:7:::
```

password and password aging) for the new user xxxxx using grep.

7. Add the new user xxxxx to sudo group without overriding the existing group membership.

```
(brandon@PearsonKali)-[~]
└─$ sudo usermod -aG sudo Bpear003
```

```
(brandon@PearsonKali)-[~]
└─$ id Bpear003
uid=1003(Bpear003) gid=1003(Bpear003) groups=1003(Bpear003),27(sudo)
```

8. Switch to the new user's account.

```
(brandon@PearsonKali)-[~]
└─$ su Bpear003
Password:
└─(Bpear003@PearsonKali)-[/home/brandon]
└─$ whoami
Bpear003

└─(Bpear003@PearsonKali)-[/home/brandon]
└─$ █
```

Task B – Group account management (12 * 5 = 60 points)

Use Linux commands to execute the following tasks:

1. Return to your home directory and determine the shell you are using.

```
(brandon@PearsonKali)-[~]
└─$ grep brandon /etc/passwd
brandon:x:1000:1000:Brandon Pearson,,,:/home/brandon:/usr/bin/zsh

└─(brandon@PearsonKali)-[~]
└─$ echo $SHELL
/usr/bin/zsh
```

2. Display the current user's ID and group membership

```
(brandon@PearsonKali)-[~]
└─$ id brandon
uid=1000(brandon) gid=1000(brandon) groups=1000(brandon),4(adm),20(dialout),24(cdrom),25(floppy),27(sudo),29(audio),30(dip),44(video),46(plugdev),100(users),106(netdev),117(wireshark),120(bluetooth),129(scanner),140(vboxsf),141(kaboxer)
```

3. Display the group membership of the root account.

```
(brandon@PearsonKali)-[~]
└─$ groups
brandon adm dialout cdrom floppy sudo audio dip video plugdev users netdev wireshark bluetooth scanner vboxsf kaboxer
```

4. Run the correct command to determine the user owner and group owner of the /etc/group file.

```
(brandon@PearsonKali)-[~]
└─$ ls -l /etc/group
-rw-r--r-- 1 root root 1440 Feb  7 18:15 /etc/group
```

5. Create a new group named test and use your UIN as the GID.

```
(brandon@PearsonKali)-[~]
└─$ sudo groupadd -g 1000 test
groupadd: GID '1000' already exists
└─$ cat /etc/group
└─$ sudo groupadd -g 2006 test
```

Used 2006 instead

6. Display the group account information for the test group using grep.

```
(brandon@PearsonKali)-[~]
└─$ grep test /etc/group
test:x:2006:
```

7. Change the group name of the test group to newtest.

```
(brandon@PearsonKali)-[~]
└─$ sudo groupmod -n newtest test
```

8. Add the current account (xxxxx) as a secondary member of the newtest group without overriding this user's current group membership.

```
(Bpear003@PearsonKali)-[~/home/brandon]
└─$ id
uid=1003(Bpear003) gid=1003(Bpear003) groups=1003(Bpear003),27(sudo),2006(newtest)
```

9. Create a new file testfile in the account's home directory, then change the group owner to newtest.

Named the file wrong newfile

```
(Bpear003@PearsonKali)-[~/home/brandon]
└─$ sudo touch newfile
[sudo] password for Bpear003:
Sorry, try again.
[sudo] password for Bpear003:
```

```
(Bpear003@PearsonKali)-[~/home/brandon]
└─$ sudo chgrp newtest newfile
```

10. Display the user owner and group owner information of the file testfile.

```
total 136720
drwxr-xr-x 2 brandon brandon    4096 Feb  2 16:21 bpear003
-rw-r--r-- 1 brandon brandon   19169 Jan 31 23:06 copyright
-rw-r--r-- 1 brandon brandon    221 Jan 31 23:41 copyright_cyse270
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Desktop
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Documents
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Downloads
-rw-r--r-- 1 brandon games     221 Jan 31 23:42 file1.txt
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Music
drwxr-xr-x 2 brandon brandon    4096 Jan 19 15:08 newdir1
-rw-r--r-- 1 root    newtest    0 Feb  7 20:36 newfile
-rw-r--r-- 1 brandon brandon    0 Jan 19 15:09 newFile1.txt
-rw-r--r-- 1 brandon games     702 Jan 24 16:16 newText.txt
-rw-r--r-- 1 brandon brandon   3229 Feb  2 15:14 passwd
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Pictures
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Public
-rw-r--r-- 1 brandon brandon 139921507 Feb  7 16:12 rockyou.txt
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Templates
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Videos

(branon003@BrandonKali) [~/home/brandon]
```

11. Delete the newtest group, then repeat the previous step. What do you find?

```
File Actions Edit View Help
└─$ sudo ls -l
total 136720
drwxr-xr-x 2 brandon brandon    4096 Feb  2 16:21 bpear003
-rw-r--r-- 1 brandon brandon   19169 Jan 31 23:06 copyright
-rw-r--r-- 1 brandon brandon    221 Jan 31 23:41 copyright_cyse270
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Desktop
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Documents
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Downloads
-rw-r--r-- 1 brandon games     221 Jan 31 23:42 file1.txt
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Music
drwxr-xr-x 2 brandon brandon    4096 Jan 19 15:08 newdir1
-rw-r--r-- 1 root    2006      0 Feb  7 20:36 newfile
-rw-r--r-- 1 brandon brandon    0 Jan 19 15:09 newFile1.txt
-rw-r--r-- 1 brandon games     702 Jan 24 16:16 newText.txt
-rw-r--r-- 1 brandon brandon   3229 Feb  2 15:14 passwd
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Pictures
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Public
-rw-r--r-- 1 brandon brandon 139921507 Feb  7 16:12 rockyou.txt
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Templates
drwxr-xr-x 2 brandon brandon    4096 Jan 12 15:27 Videos
```

The file is now owned by the GID of the group 2006 which makes the group permission worthless

12. Delete the user xxxxx along with the home directory using a single command.

```
(brandon@PearsonKali)-[~]  
$ sudo userdel -r Bpear003  
[sudo] password for brandon:  
userdel: Bpear003 mail spool (/var/mail/Bpear003) not found
```