

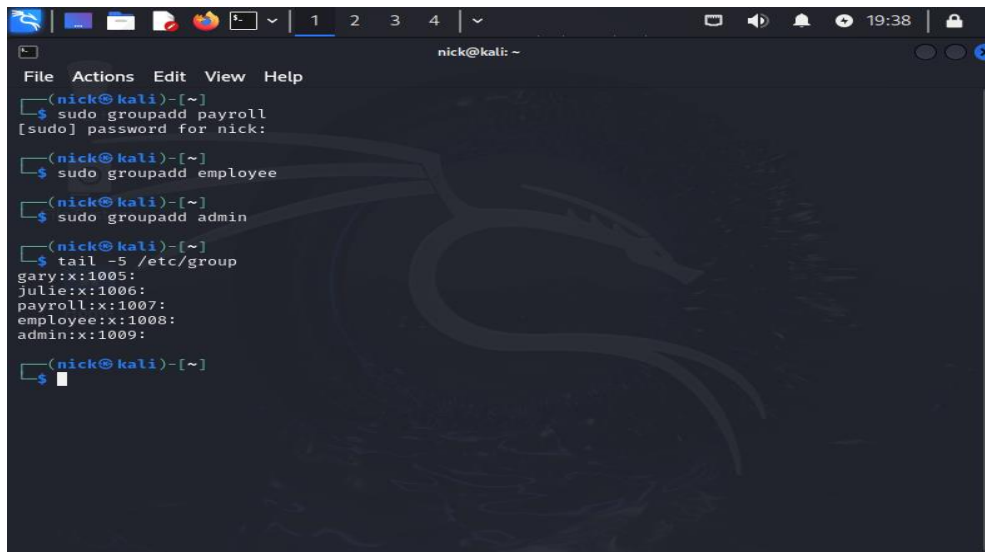
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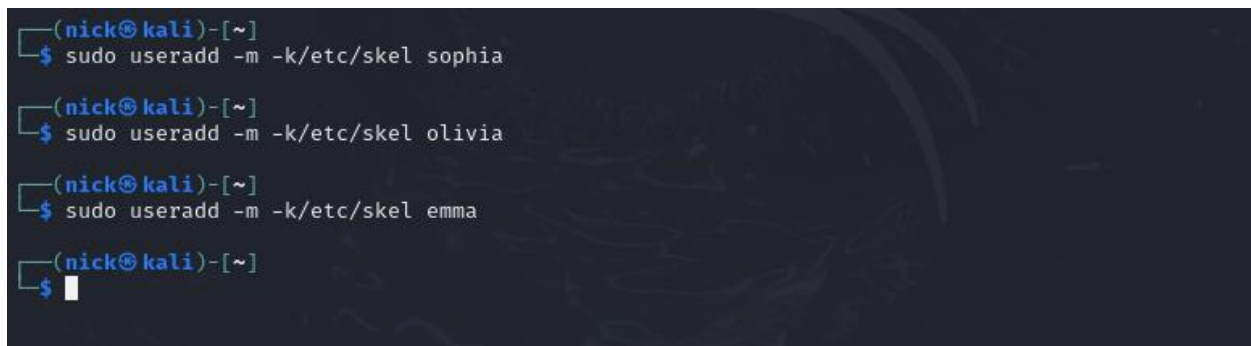
Lab 6

### Step 1: Creating groups



```
(nick@kali)-[~]
└─$ sudo groupadd payroll
[sudo] password for nick:
(nick@kali)-[~]
└─$ sudo groupadd employee
(nick@kali)-[~]
└─$ sudo groupadd admin
(nick@kali)-[~]
└─$ tail -5 /etc/group
gary:x:1005:
julie:x:1006:
payroll:x:1007:
employee:x:1008:
admin:x:1009:
(nick@kali)-[~]
└─$
```

### Step 2: Adding the users with home directories.



```
(nick@kali)-[~]
└─$ sudo useradd -m -k/etc/skel sophia
(nick@kali)-[~]
└─$ sudo useradd -m -k/etc/skel olivia
(nick@kali)-[~]
└─$ sudo useradd -m -k/etc/skel emma
(nick@kali)-[~]
└─$
```

## Setting user passwords

```
(nick@kali)-[~]
└─$ sudo passwd sophia
New password:
Retype new password:
passwd: password updated successfully

(nick@kali)-[~]
└─$ sudo passwd olivia
New password:
Retype new password:
passwd: password updated successfully

(nick@kali)-[~]
└─$ sudo passwd emma
New password:
Retype new password:
passwd: password updated successfully

(nick@kali)-[~]
└─$
```

adding users to the groups that were created and setting bin/bash to their default.

```
(nick@kali)-[~]
└─$ sudo usermod -g employee sophia

(nick@kali)-[~]
└─$ id sophia
id=1007(sophia) gid=1008(employee) groups=1008(employee)

(nick@kali)-[~]
└─$ sudo usermod -g payroll olivia

(nick@kali)-[~]
└─$ sudo usermod -g admin emma

(nick@kali)-[~]
└─$ sudo usermod -s /bin/bash sophia

(nick@kali)-[~]
└─$ sudo usermod -s /bin/bash emma

(nick@kali)-[~]
└─$ sudo usermod -s /bin/bash olivia

(nick@kali)-[~]
└─$
```

## Step 3: Adding users to their groups

```
(nick@kali)-[~]
└─$ sudo groupadd ncarp006

(nick@kali)-[~]
└─$ sudo usermod -G ncarp006 -a sophia

(nick@kali)-[~]
└─$ sudo usermod -G ncarp006 -a emma

(nick@kali)-[~]
└─$ sudo usermod -G ncarp006 -a olivia

(nick@kali)-[~]
└─$ id sophia
id=1007(sophia) gid=1008(employee) groups=1008(employee),1013(ncarp006)

(nick@kali)-[~]
└─$ id emma
id=1009(emma) gid=1009(admin) groups=1009(admin),1013(ncarp006)

(nick@kali)-[~]
└─$ id olivia
id=1008(olivia) gid=1007(payload) groups=1007(payload),1013(ncarp006)

(nick@kali)-[~]
└─$
```

s that were created.

#### Step 4: Creating the project for the users

```
(nick@kali)-[~]
└─$ sudo mkdir /home/cyse_project

(nick@kali)-[~]
└─$ ls -ld /home/cyse_project
ls: cannot access '-': No such file or directory
ls: cannot access 'ld': No such file or directory
/home/cyse_project:

(nick@kali)-[~]
└─$ sudo ls -ld /home/cyse_project
drwxr-xr-x 2 root root 4096 Jun 20 20:04 /home/cyse_project

(nick@kali)-[~]
└─$ sudo chgrp ncarp006 /home/cyse_project

(nick@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxr-xr-x 2 root ncarp006 4096 Jun 20 20:04 /home/cyse_project

(nick@kali)-[~]
└─$
```

#### Step 5: changing the permissions on the project

```
(nick@kali)-[~]
└─$ sudo chmod 770 /home/cyse_project

(nick@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxrwx--- 2 root ncarp006 4096 Jun 20 20:04 /home/cyse_project

(nick@kali)-[~]
└─$
```

#### Step 6: changing to Sophia and checking the umask

```
(nick@kali)-[~]
└─$ su sophia
Password:
(sophia@kali)-[/home/nick]
└─$ umask
0022

(sophia@kali)-[/home/nick]
└─$ umask 027
```

Making sure that the umask permissions that were set were applied to a sample test file

```
(sophia@kali)-[~]
└─$ ls -l testfile.txt
-rw-r----- 1 sophia employee 0 Jun 20 20:14 testfile.txt
```

Step 7: creating sophia's homework, viewing that it was created, placing my name into the homework file, and reviewing the permissions.

```
(sophia@kali)-[~]
└─$ touch sophia_homework

(sophia@kali)-[~]
└─$ ls
sophia_homework  testfile.txt

(sophia@kali)-[~]
└─$ echo this is nick file > sophia_homework

(sophia@kali)-[~]
└─$ cat sophia_homework
this is nick file

(sophia@kali)-[~]
└─$ ls -l sophia_homework
-rw-r----- 1 sophia employee 18 Jun 20 20:19 sophia_homework

(sophia@kali)-[~]
└─$
```

Step 8: copying the homework into the group file and viewing the permissions

```
(sophia@kali)-[~]
└─$ cp sophia_homework /home/cyse_project

(sophia@kali)-[~]
└─$ ls -l /home/cyse_project
total 4
-rw-r----- 1 sophia employee 18 Jun 20 20:21 sophia_homework

(sophia@kali)-[~]
└─$
```

Step 9: Switching to emma, changing into the project directory and attempting to view sophia's homework.

```
(sophia@kali)-[~]
└─$ su emma
Password:
(emma@kali)-[/home/sophia]
└─$ cd /home/cyse_project

(emma@kali)-[/home/cyse_project]
└─$ ls-l
ls-l: command not found

(emma@kali)-[/home/cyse_project]
└─$ ls - l
ls: cannot access '-': No such file or directory
ls: cannot access 'l': No such file or directory

(emma@kali)-[/home/cyse_project]
└─$ ls -l
total 4
-rw-r----- 1 sophia employee 18 Jun 20 20:21 sophia_homework

(emma@kali)-[/home/cyse_project]
└─$ cat sophia_homework
cat: sophia_homework: Permission denied

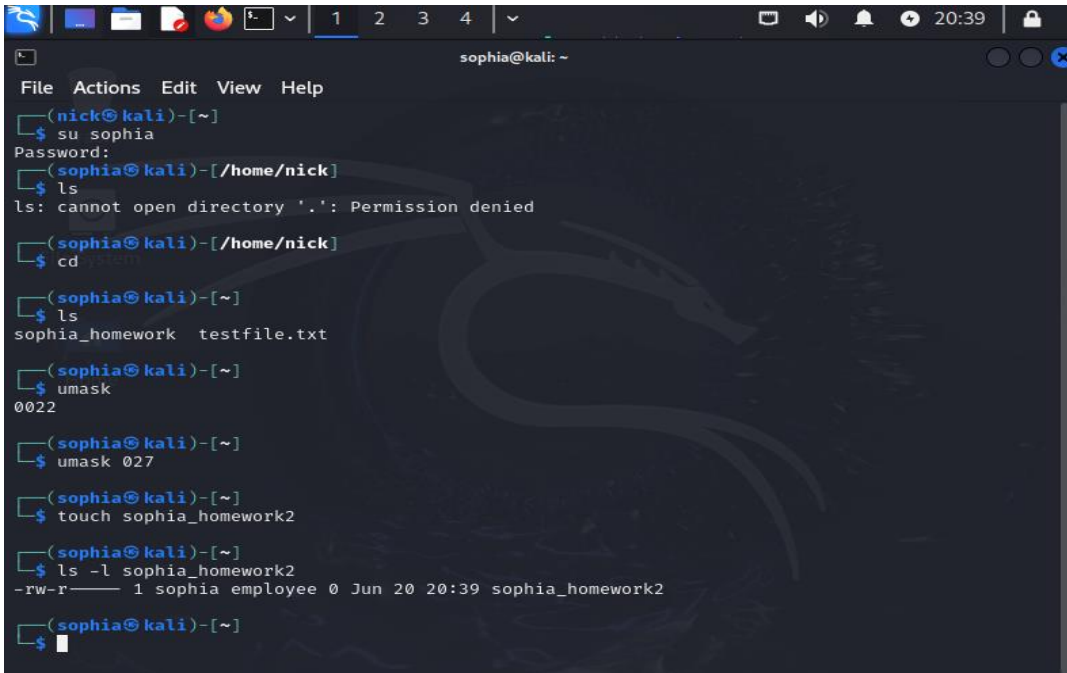
(emma@kali)-[/home/cyse_project]
└─$
```

Exiting from the user accounts.

```
(emma@kali)-[~]
└─$ su nick
Password:
(nick@kali)-[/home/emma]
└─$
```

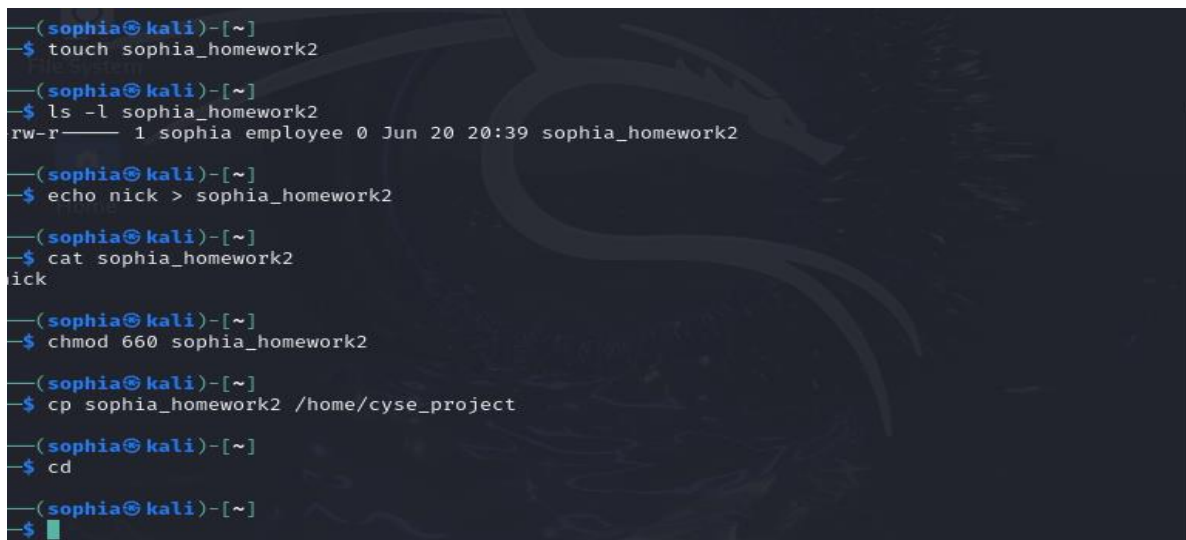
**TASK B:** ( I did get confused on some of task B and C. Therefore, I am not sure if I got all of the problems correct)

Step 1: Getting into sophia's account and setting the correct umask values and creating the homework



```
sophia@kali: ~  
File Actions Edit View Help  
└─(nick@kali)-[~]  
└─$ su sophia  
Password:  
└─(sophia@kali)-[/home/nick]  
└─$ ls  
ls: cannot open directory '.': Permission denied  
└─(sophia@kali)-[/home/nick]  
└─$ cd  
└─(sophia@kali)-[~]  
└─$ ls  
sophia_homework  testfile.txt  
└─(sophia@kali)-[~]  
└─$ umask  
0022  
└─(sophia@kali)-[~]  
└─$ umask 027  
└─(sophia@kali)-[~]  
└─$ touch sophia_homework2  
└─(sophia@kali)-[~]  
└─$ ls -l sophia_homework2  
-rw-r----- 1 sophia employee 0 Jun 20 20:39 sophia_homework2  
└─(sophia@kali)-[~]  
└─$
```

Getting into sophia's account and creating homework 2. Looking at the permissions to ensure that they were properly set. I then Placed my name in the file and then viewed the file. The Chmod will be changed to a different value in a later step (664)



```
└─(sophia@kali)-[~]  
└─$ touch sophia_homework2  
└─(sophia@kali)-[~]  
└─$ ls -l sophia_homework2  
rw-r----- 1 sophia employee 0 Jun 20 20:39 sophia_homework2  
└─(sophia@kali)-[~]  
└─$ echo nick > sophia_homework2  
└─(sophia@kali)-[~]  
└─$ cat sophia_homework2  
nick  
└─(sophia@kali)-[~]  
└─$ chmod 660 sophia_homework2  
└─(sophia@kali)-[~]  
└─$ cp sophia_homework2 /home/cyse_project  
└─(sophia@kali)-[~]  
└─$ cd  
└─(sophia@kali)-[~]  
└─$
```

Step 3: Copying sophia's new homework file into the directory. I then viewed to make sure it was copied correctly. Afterwards, I copied the original homework as the new homework file.

```
(sophia@kali)-[~]
└─$ cp sophia_homework2 /home/cyse_project

(sophia@kali)-[~]
└─$ cd

(sophia@kali)-[~]
└─$ ls -l
total 8
-rw-r----- 1 sophia employee 18 Jun 20 20:19 sophia_homework
-rw-rw----- 1 sophia employee  5 Jun 20 20:40 sophia_homework2
-rw-r----- 1 sophia employee  0 Jun 20 20:14 testfile.txt

(sophia@kali)-[~]
└─$ cp sophia_homework /home/cyse_project/sophia_homework2

(sophia@kali)-[~]
└─$ su emma
Password:
(emma@kali)-[~/home/sophia]
└─$
```

Step 4: I logged in as emma and changed into the group project directory. I attempted to view the contents of the file and was able to.

```
File Actions Edit View Help

(emma@kali)-[~/home/cyse_project]
└─$ ls -l
total 8
-rw-r----- 1 sophia employee 18 Jun 20 20:21 sophia_homework
-rw-rw----- 1 sophia employee 18 Jun 20 20:49 sophia_homework2

(emma@kali)-[~/home/cyse_project]
└─$ su sophia
Password:
(sophia@kali)-[~/home/cyse_project]
└─$ chmod 664 sophia_homework2

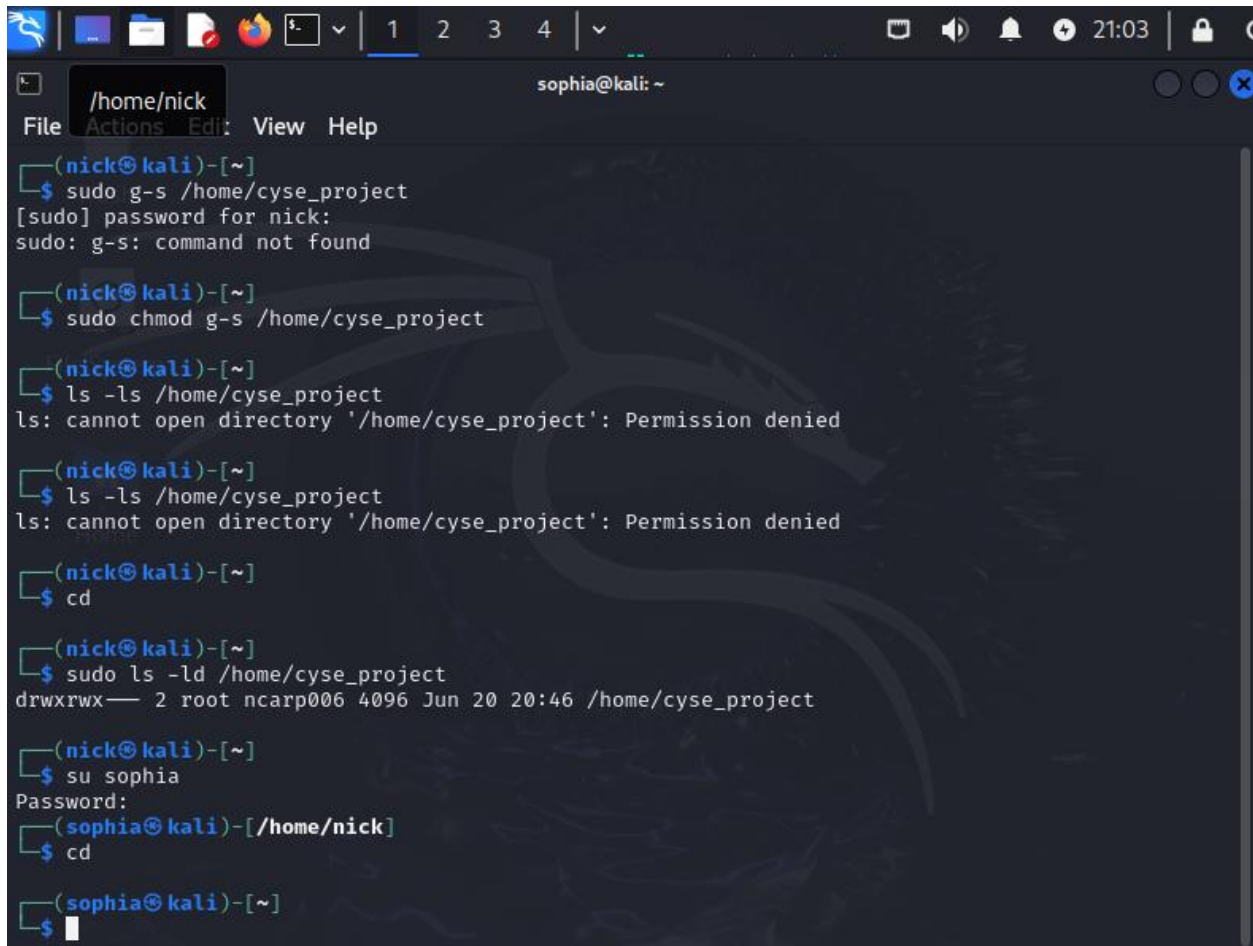
(sophia@kali)-[~/home/cyse_project]
└─$ su emma
Password:
(emma@kali)-[~/home/cyse_project]
└─$ cd /home/cyse_project

(emma@kali)-[~/home/cyse_project]
└─$ ls -l
total 8
-rw-r----- 1 sophia employee 18 Jun 20 20:21 sophia_homework
-rw-rw-r-- 1 sophia employee 18 Jun 20 20:49 sophia_homework2

(emma@kali)-[~/home/cyse_project]
└─$ cat sophia_homework2
this is nick file

(emma@kali)-[~/home/cyse_project]
└─$
```

**Task C:** Not allowing the group members to access the file. Then listing that other users do not have the permissions and changing to sophia's account.



```
(nick@kali)-[~]
└─$ sudo g-s /home/cyse_project
[sudo] password for nick:
sudo: g-s: command not found

(nick@kali)-[~]
└─$ sudo chmod g-s /home/cyse_project

(nick@kali)-[~]
└─$ ls -ls /home/cyse_project
ls: cannot open directory '/home/cyse_project': Permission denied

(nick@kali)-[~]
└─$ ls -ls /home/cyse_project
ls: cannot open directory '/home/cyse_project': Permission denied

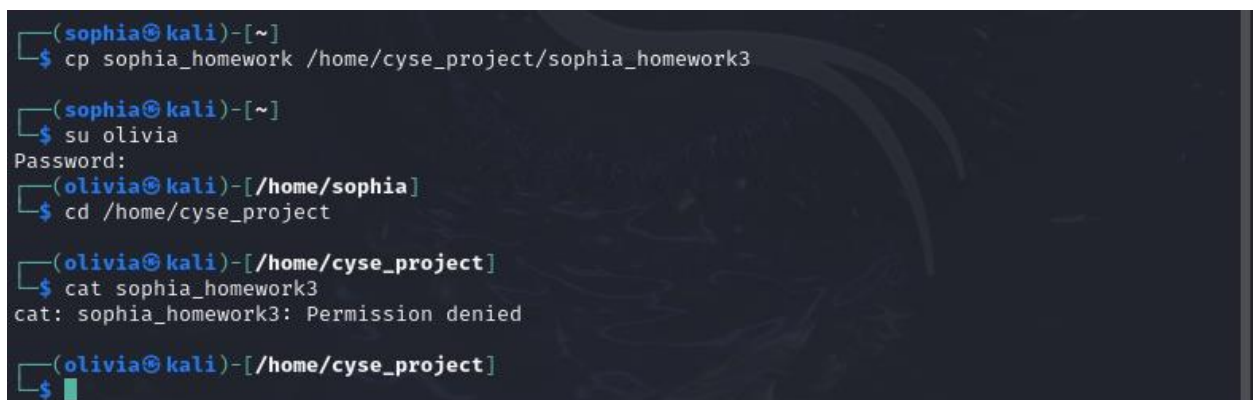
(nick@kali)-[~]
└─$ cd

(nick@kali)-[~]
└─$ sudo ls -ld /home/cyse_project
drwxrwx--- 2 root ncarp006 4096 Jun 20 20:46 /home/cyse_project

(nick@kali)-[~]
└─$ su sophia
Password:
(sophia@kali)-[~/home/nick]
└─$ cd

(sophia@kali)-[~]
```

Steps 2 and 3: copying the homework into the project and switching to olivia to see if I could view the file. Permission was denied.



```
(sophia@kali)-[~]
└─$ cp sophia_homework /home/cyse_project/sophia_homework3

(sophia@kali)-[~]
└─$ su olivia
Password:
(olivia@kali)-[~/home/sophia]
└─$ cd /home/cyse_project

(olivia@kali)-[~/home/cyse_project]
└─$ cat sophia_homework3
cat: sophia_homework3: Permission denied

(olivia@kali)-[~/home/cyse_project]
└─$
```