

Task A:

Step 1

```
(sadeFAULTS09@kali)-[~]
└─$ sudo groupadd employee
[sudo] password for sadeFAULTS09:

(sadeFAULTS09@kali)-[~]
└─$ sudo groupadd payroll

(sadeFAULTS09@kali)-[~]
└─$ sudo groupadd admin

(sadeFAULTS09@kali)-[~]
```

Step 2

```
(sadeFAULTS09@kali)-[~]
└─$ sudo useradd -m -d /home/sophia sophia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -g employee sophia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -s /bin/bash sophia

(sadeFAULTS09@kali)-[~]
└─$ sudo passwd sophia
New password:
Retype new password:
passwd: password updated successfully
```

```
(sadeFAULTS09@kali)-[~]
└─$ sudo useradd -m -d /home/olivia olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -g payroll olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -s /bin/bash olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo passwd olivia
New password:
Retype new password:
passwd: password updated successfully
```

```
(sadeFAULTS09@kali)-[~]
└─$ sudo useradd -m -d /home/olivia olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -g payroll olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo usermod -s /bin/bash olivia

(sadeFAULTS09@kali)-[~]
└─$ sudo passwd olivia
New password:
Retype new password:
passwd: password updated successfully
```

Step 3

```
(sade Faulks09@kali)-[~]
└─$ sudo groupadd sfaul001

(sade Faulks09@kali)-[~]
└─$ sudo usermod -aG sfaul001 sophia

(sade Faulks09@kali)-[~]
└─$ groups sophia
sophia : employee sfaul001

(sade Faulks09@kali)-[~]
└─$ sudo usermod -aG sfaul001 olivia

(sade Faulks09@kali)-[~]
└─$ groups olivia
olivia : payroll sfaul001

(sade Faulks09@kali)-[~]
└─$ sudo usermod -aG sfaul001 emma

(sade Faulks09@kali)-[~]
└─$ groups emma
emma : admin sfaul001
```

Step 4

```
(sade Faulks09@kali)-[~]
└─$ sudo mkdir /home/cyse_project

(sade Faulks09@kali)-[~]
└─$ sudo chown :sfaul001 /home/cyse_project

(sade Faulks09@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxr-xr-x 2 root sfaul001 4096 Oct 12 22:08 /home/cyse_project

(sade Faulks09@kali)-[~]
└─$
```

Step 5

```
(sade Faulks09@kali)-[~]
└─$ sudo chmod 770 /home/cyse_project

(sade Faulks09@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxrwx--- 2 root sfaul001 4096 Oct 12 22:08 /home/cyse_project
```

Step 6&7

```
(sade Faulks@kali)-[~]
└─$ su - sophia
Password:
(sophia@kali)-[~]
└─$ umask 026

(sophia@kali)-[~]
└─$ umask # verify
0026

(sophia@kali)-[~]
└─$ echo Sade Faulks > ~/Sophia_homework

(sophia@kali)-[~]
└─$ ls -l ~/Sophia_homework
-rw-r----- 1 sophia employee 12 Oct 12 22:47 /home/sophia/Sophia_homework

(sophia@kali)-[~]
└─$ cat ~/Sophia_homework
Sade Faulks
```

Step 8

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

(sophia@kali)-[~]
└─$ ls -l /home/cyse_project
total 4
-rw-r----- 1 sophia employee 12 Oct 12 22:49 Sophia_homework
```

Step 9

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

Step 10

```
(emma@kali)-[~]
└─$ exit
logout

(sophia@kali)-[~]
└─$ exit
logout

(sadefaults09@kali)-[~]
└─$
```

Task B

Step 1

```
(sadefaults09@kali)-[~]
└─$ sudo chmod g+s /home/cyse_project
[sudo] password for sadefaults09:

(sadefaults09@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxrws— 2 root sfaul001 4096 Oct 12 22:49 /home/cyse_project
```

Step 2

```
(sadefaults09@kali)-[~]
└─$ su - sophia
Password:
(sophia@kali)-[~]
└─$ cp ~/Sophia_homework /home/cyse_project/Sophia_homework2

(sophia@kali)-[~]
└─$ ls -l /home/cyse_project
total 8
-rw-r— 1 sophia employee 12 Oct 12 22:49 Sophia_homework
-rw-r— 1 sophia sfaul001 12 Oct 12 23:02 Sophia_homework2
```

Step 3

```
(sophia@kali)-[~]
└─$ su - emma
Password:
(emma@kali)-[~]
└─$ cat /home/cyse_project/Sophia_homework2
Sade Faulks
```

Task C

Step 1

```
(sade Faulks09@kali)-[~]
└─$ sudo chmod g-s /home/cyse_project

(sade Faulks09@kali)-[~]
└─$ sudo chmod 760 /home/cyse_project

(sade Faulks09@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxrw---- 2 root sfaul001 4096 Oct 12 23:02 /home/cyse_project
```

Step 2

```
(sade Faulks09@kali)-[~]
└─$ su - sophia
Password:
(sophia@kali)-[~]
└─$ cp ~/Sophia_homework /home/cyse_project/Sophia_homework3
cp: cannot stat '/home/cyse_project/Sophia_homework3': Permission denied
```

Step 3

```
(sade Faulks09@kali)-[~]
└─$ su - sophia
Password:
(sophia@kali)-[~]
└─$ cp ~/Sophia_homework /home/cyse_project/Sophia_homework3
cp: cannot stat '/home/cyse_project/Sophia_homework3': Permission denied
```