

Task A

1.

```
(adrianvaal@kali)-[~]  
$ sudo groupadd employee  
[sudo] password for adrianvaal:  
  
(adrianvaal@kali)-[~]  
$ sudo groupadd payroll  
  
(adrianvaal@kali)-[~]  
$ sudo groupadd admin
```

2.

```
(adrianvaal@kali)-[~]  
$ sudo useradd -m -d /home/sophia -g employee -s /bin/bash Sophia  
[sudo] password for adrianvaal:  
  
(adrianvaal@kali)-[~]  
$ sudo useradd -m -d /home/olivia -g payroll -s /bin/bash Olivia  
  
(adrianvaal@kali)-[~]  
$ sudo useradd -m -d /home/emma -g admin -s /bin/bash Emma  
  
(adrianvaal@kali)-[~]  
$ sudo passwd Sophia  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(adrianvaal@kali)-[~]  
$ sudo passwd Olivia  
New password:  
Retype new password:  
passwd: password updated successfully  
  
(adrianvaal@kali)-[~]  
$ sudo passwd Emma  
New password:  
Retype new password:  
passwd: password updated successfully
```

3.

```
(adrianvaal@kali)-[~]  
$ sudo groupadd avale022
```

```
(adrianvaal@kali)-[~]  
$ sudo usermod -aG avale022 Sophia
```

```
(adrianvaal@kali)-[~]  
$ sudo usermod -aG avale022 Olivia
```

```
(adrianvaal@kali)-[~]  
$ sudo usermod -aG avale022 Emma
```

```
(adrianvaal@kali)-[~]  
$ groups Sophia  
Sophia : employee avale022
```

```
(adrianvaal@kali)-[~]  
$ groups Olivia  
Olivia : payroll avale022
```

```
(adrianvaal@kali)-[~]  
$ groups Emma  
Emma : admin avale022
```

4.

```
(adrianvaal@kali)-[~]  
$ sudo mkdir /home/cyse_project
```

```
(adrianvaal@kali)-[~]  
$ sudo chown :avale022 /home/cyse_project
```

```
(adrianvaal@kali)-[~]  
$ ls -ld /home/cyse_project  
drwxr-xr-x 2 root avale022 4096 Oct 12 17:39 /home/cyse_project
```

5.

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

```
(adrianvaal@kali)-[~]  
$ ls -ld /home/cyse_project  
drwxrwx--- 2 root avale022 4096 Oct 12 17:39 /home/cyse_project
```

6.

```
(adrianvaal@kali)-[~]  
$ su - Sophia  
Password:
```

```
(Sophia@kali)-[~]  
$ umask  
0002
```

```
(Sophia@kali)-[~]  
$ umask 027
```

```
(Sophia@kali)-[~]  
$ umask  
0027
```

7.

```
(Sophia@kali)-[~]  
$ echo "Adrian" > Sophia_homework  
  
(Sophia@kali)-[~]  
$ ls -l Sophia_homework  
-rw-r----- 1 Sophia employee 7 Oct 12 17:50 Sophia_homework  
  
(Sophia@kali)-[~]  
$ cat Sophia_homework  
Adrian
```

8.

```
(Sophia@kali)-[~]  
$ cp ~/Sophia_homework /home/cyse_project  
  
(Sophia@kali)-[~]  
$ ls -l /home/cyse_project  
total 4  
-rw-r----- 1 Sophia employee 7 Oct 12 17:52 Sophia_homework
```

9.

```
(Sophia@kali)-[~]  
$ su - Emma  
Password:  
(Emma@kali)-[~]  
$ cd /home/cyse_project  
  
(Emma@kali)-[/home/cyse_project]  
$ cat Sophia_homework  
cat: Sophia_homework: Permission denied
```

10.

```
(Emma@kali)-[/home/cyse_project]  
$ exit  
logout  
  
(Sophia@kali)-[~]  
$ exit  
logout
```

Task B:

1.

```
(adrianvaal@kali)-[~]  
$ sudo chmod g+s /home/cyse_project  
[sudo] password for adrianvaal:  
  
(adrianvaal@kali)-[~]  
$ ls -ld /home/cyse_project  
drwxrws— 2 root avale022 4096 Oct 12 17:52 /home/cyse_project
```

2.

```
(adrianvaal@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 7 Oct 12 17:52 Sophia_homework
-rw-r----- 1 Sophia avale022 7 Oct 12 18:09 Sophia_homework2
```

3.

```
(Sophia@kali)-[~]
$ su - Emma
Password:
(Emma@kali)-[~]
$ cd /home/cyse_project

(Emma@kali)-[/home/cyse_project]
$ cat Sophia_homework2
Adrian
```

Task C:

1.

```
(adrianvaal@kali)-[~]
$ sudo chmod g-s /home/cyse_project

(adrianvaal@kali)-[~]
$ ls -ld /home/cyse_project
drwxrwx--- 2 root avale022 4096 Oct 12 18:09 /home/cyse_project
```

2.

```
(adrianvaal@kali)-[~]
$ su - Sophia
Password:
(Sophia@kali)-[~]
$ cp ~/Sophia_homework /home/cyse_project/Sophia_homework3
```

```
(Sophia@kali)-[~]  
$ su - Olivia  
Password:  
(Olivia@kali)-[~]  
$ cd /home/cyse_project  
  
(Olivia@kali)-[/home/cyse_project]  
$ cd /home/cyse_project  
  
(Olivia@kali)-[/home/cyse_project]  
$ cat Sophia_homework3  
cat: Sophia_homework3: Permission denied
```

3.