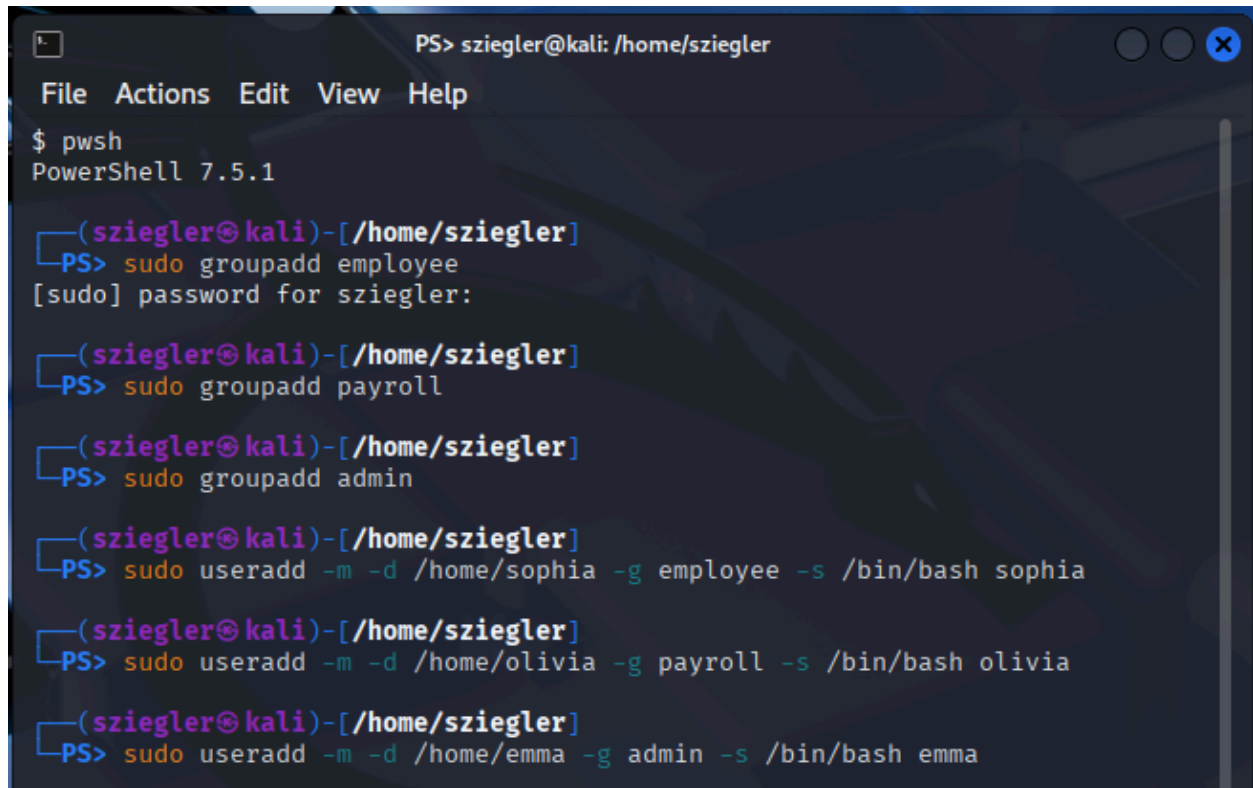


Shawn Ziegler

Steps 1 and 2



```
PS> sziegler@kali: /home/sziegler
File Actions Edit View Help
$ pwsh
PowerShell 7.5.1

(sziegler@kali)-[/home/sziegler]
└─PS> sudo groupadd employee
[sudo] password for sziegler:

(sziegler@kali)-[/home/sziegler]
└─PS> sudo groupadd payroll

(sziegler@kali)-[/home/sziegler]
└─PS> sudo groupadd admin

(sziegler@kali)-[/home/sziegler]
└─PS> sudo useradd -m -d /home/sophia -g employee -s /bin/bash sophia

(sziegler@kali)-[/home/sziegler]
└─PS> sudo useradd -m -d /home/olivia -g payroll -s /bin/bash olivia

(sziegler@kali)-[/home/sziegler]
└─PS> sudo useradd -m -d /home/emma -g admin -s /bin/bash emma
```

```
PS> sziegler@kali: /home/sziegler
File Actions Edit View Help

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> sudo useradd -m -d /home/emma -g admin -s /bin/bash emma

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> sudo useradd -m -d /home/emma -g admin -s /bin/bash emma
useradd: user 'emma' already exists

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> sudo passwd sophia
New password:
Retype new password:
passwd: password updated successfully

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> sudo passwd olivia
New password:
Retype new password:
passwd: password updated successfully

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> sudo passwd emma
New password:
Retype new password:
passwd: password updated successfully

(sziegler@kali)-[/home/sziegler]
└─┬─ PS> █
```

Step 3

```
PS> sziegler@kali: /home/sziegler
File Actions Edit View Help
passwd: password updated successfully

(sziegler@kali)-[/home/sziegler]
PS> sudo groupadd szieg004

(sziegler@kali)-[/home/sziegler]
PS> sudo usermod -aG szieg004 sophia

(sziegler@kali)-[/home/sziegler]
PS> sudo usermod -aG szieg004 olivia

(sziegler@kali)-[/home/sziegler]
PS> sudo usermod -aG szieg004 emma

(sziegler@kali)-[/home/sziegler]
PS> groups sophia
sophia : employee szieg004

(sziegler@kali)-[/home/sziegler]
PS> groups olivia
olivia : payroll szieg004

(sziegler@kali)-[/home/sziegler]
PS> groups emma
emma : admin szieg004

(sziegler@kali)-[/home/sziegler]
PS> █
```

Steps 4-6

```
sophia@kali: ~  
File Actions Edit View Help  
  
(sziegler@kali)-[/home/sziegler]  
PS> sudo mkdir /home/cyse_project  
  
(sziegler@kali)-[/home/sziegler]  
PS> sudo chown :szieg004 /home/cyse_project  
  
(sziegler@kali)-[/home/sziegler]  
PS> ls -ld /home/cyse_project  
drwxr-xr-x 2 root szieg004 4096 Oct 11 18:47 /home/cyse_project  
  
(sziegler@kali)-[/home/sziegler]  
PS> sudo chmod 770 /home/cyse_project  
  
(sziegler@kali)-[/home/sziegler]  
PS> ls-ld /home/cyse_project  
ls-ld: The term 'ls-ld' is not recognized as a name of a cmdlet, function, sc  
ript file, or executable program.  
Check the spelling of the name, or if a path was included, verify that the pa  
th is correct and try again.  
  
(sziegler@kali)-[/home/sziegler]  
PS> ls -ld /home/cyse_project  
drwxrwx--- 2 root szieg004 4096 Oct 11 18:47 /home/cyse_project  
  
(sziegler@kali)-[/home/sziegler]  
PS> su - sophia  
Password:
```

```
sophia@kali: ~  
File Actions Edit View Help  
$ pwsh  
PowerShell 7.5.1  
  
(sziegler@kali)-[/home/sziegler]  
PS> su - sophia  
Password:  
(sophia@kali)-[~]  
$ umask 027  
  
(sophia@kali)-[~]  
$ umask  
0027  
  
(sophia@kali)-[~]  
$
```

Steps 7 and 8

```
sophia@kali: ~  
File Actions Edit View Help  
Password:  
(sophia@kali)-[~]  
└─$ umask 027  
  
(sophia@kali)-[~]  
└─$ umask  
0027  
  
(sophia@kali)-[~]  
└─$ echo "Shawn Ziegler" > /home/sophia/Sophia_homework  
  
(sophia@kali)-[~]  
└─$ ls -l /home/sophia/Sophia_homework  
-rw-r----- 1 sophia employee 14 Oct 11 19:08 /home/sophia/Sophia_homework  
  
(sophia@kali)-[~]  
└─$ cp /homework/sophia/Sophia_homework /home/cyse_project/  
cp: cannot stat '/homework/sophia/Sophia_homework': No such file or directory  
  
(sophia@kali)-[~]  
└─$ cp /home/sophia/Sophia_homework /home/cyse_project/  
  
(sophia@kali)-[~]  
└─$ ls -l /home/sophia/Sophia_homework  
-rw-r----- 1 sophia employee 14 Oct 11 19:08 /home/sophia/Sophia_homework  
  
(sophia@kali)-[~]  
└─$ █
```

Steps 9 and 10

```
emma@kali: /home/sophia
File Actions Edit View Help

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

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

```
PS> sziegler@kali: /home/sziegler
File Actions Edit View Help

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

(sophia@kali)-[~/home/sophia]
└─$ exit
exit

(sophia@kali)-[~]
└─$ exit
logout

(sziegler@kali)-[~/home/sziegler]
└─PS> █
```

Task B

Steps 1-3

```
emma@kali: /home/sziegler
File Actions Edit View Help

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

(sziegler@kali)-[~]
└─$ ls -ld /home/cyse_project
drwxrws— 2 root szieg004 4096 Oct 11 19:09 /home/cyse_project

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

(sophia@kali)-[/home/sziegler]
└─$ ls -l /home/cyse_project/Sophia_homework2
-rw-r— 1 sophia szieg004 14 Oct 11 19:21 /home/cyse_project/Sophia_homework2

(sophia@kali)-[/home/sziegler]
└─$ su emma
Password:
(emma@kali)-[/home/sziegler]
└─$ cat /home/cyse_project/Sophia_homework2
Shawn Ziegler

(emma@kali)-[/home/sziegler]
└─$
```

Task C

Steps 1-3

```
olivia@kali: /home/sophia
File Actions Edit View Help

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

(sziegler@kali)-[/home/sophia]
└─$ ls -ld /home/cyse_project
drwxrwx--- 2 root szieg004 4096 Oct 11 19:21 /home/cyse_project

(sziegler@kali)-[/home/sophia]
└─$ su sophia
Password:
(sophia@kali)-[~]
└─$ cp Sophia_homework /home/cyse_project/Sophia_homework3

(sophia@kali)-[~]
└─$ su olivia
Password:
(olivia@kali)-[/home/sophia]
└─$ cat /home/cyse_project/Sophia_homework3
cat: /home/cyse_project/Sophia_homework3: No such file or directory

(olivia@kali)-[/home/sophia]
└─$ cat /home/cyse_project/Sophia_homework3
cat: /home/cyse_project/Sophia_homework3: Permission denied

(olivia@kali)-[/home/sophia]
└─$
```

Extra Credit

Steps 1-3

```
sziegler@kali: /home/sophia
File Actions Edit View Help

(olivia@kali)-[/home/sophia]
└─$ rm /home/cyse_project/Sophia_homework
rm: remove write-protected regular file '/home/cyse_project/Sophia_homework'?
y

(olivia@kali)-[/home/sophia]
└─$ exit
exit

(olivia@kali)-[/home/sophia]
└─$ su sziegler
Password:
(sziegler@kali)-[/home/sophia]
└─$ █
```

```
olivia@kali: /home/sophia
File Actions Edit View Help
(olivia@kali)-[/home/sophia]
└─$ su sziegler
Password:
(sziegler@kali)-[/home/sophia]
└─$ sudo chmod +t /home/cyse_project

(sziegler@kali)-[/home/sophia]
└─$ su olivia
Password:
(olivia@kali)-[/home/sophia]
└─$ rm /home/cyse_project/Sophia_homework3
rm: remove write-protected regular file '/home/cyse_project/Sophia_homework3'
?

(olivia@kali)-[/home/sophia]
└─$ rm /home/cyse_project/Sophia_homeowrk3
rm: cannot remove '/home/cyse_project/Sophia_homeowrk3': No such file or directory

(olivia@kali)-[/home/sophia]
└─$ rm /home/cyse_project/Sophia_homework3
rm: remove write-protected regular file '/home/cyse_project/Sophia_homework3'
? y
rm: cannot remove '/home/cyse_project/Sophia_homework3': Operation not permitted

(olivia@kali)-[/home/sophia]
└─$
```

I was not able to delete the file because setting a sticky bit only allows the owner of the file the ability to delete the file.