

Ganpat University
Faculty of Engineering & Technology
Computer Science & Engineering
(2CSE204) Basics of Operating System and Shell Scripting

Name:- Dwij Vatsal Desai

Sem:- 2

Sub: - BOSS

Enrollment No.:- 23162121027

Prac:- 7

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Practical 7

1. There is a directory named **attendance** and its group owner is **your_name**.

Command:-

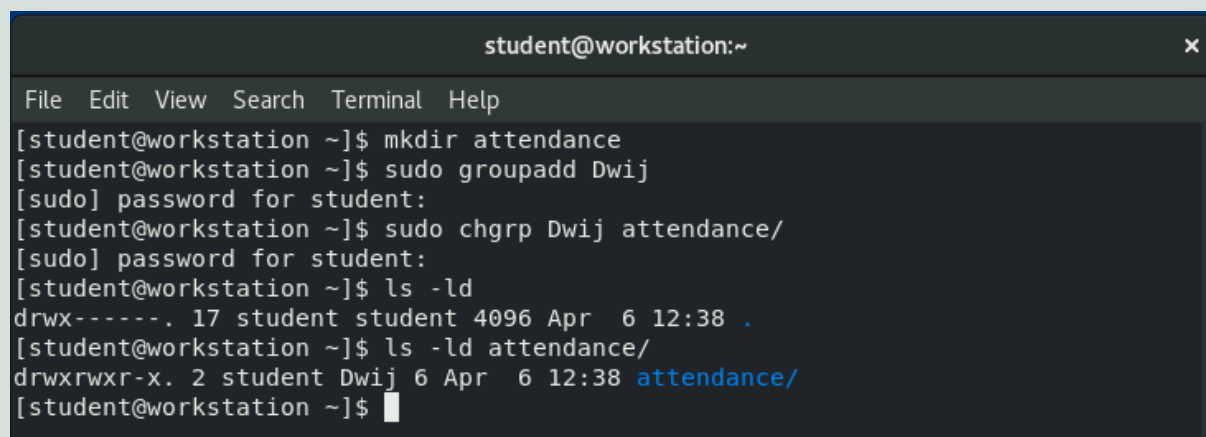
mkdir attendance

sudo groupadd Dwij

sudo chgrp Dwij attendance/

ls -ld attendance/

Screenshot:-



```
student@workstation:~  
File Edit View Search Terminal Help  
[student@workstation ~]$ mkdir attendance  
[student@workstation ~]$ sudo groupadd Dwij  
[sudo] password for student:  
[student@workstation ~]$ sudo chgrp Dwij attendance/  
[sudo] password for student:  
[student@workstation ~]$ ls -ld  
drwx-----. 17 student student 4096 Apr  6 12:38 .  
[student@workstation ~]$ ls -ld attendance/  
drwxrwxr-x. 2 student Dwij 6 Apr  6 12:38 attendance/  
[student@workstation ~]$
```

2. The group **teaching** contains four members named **user1** to **user4**.

Command:-

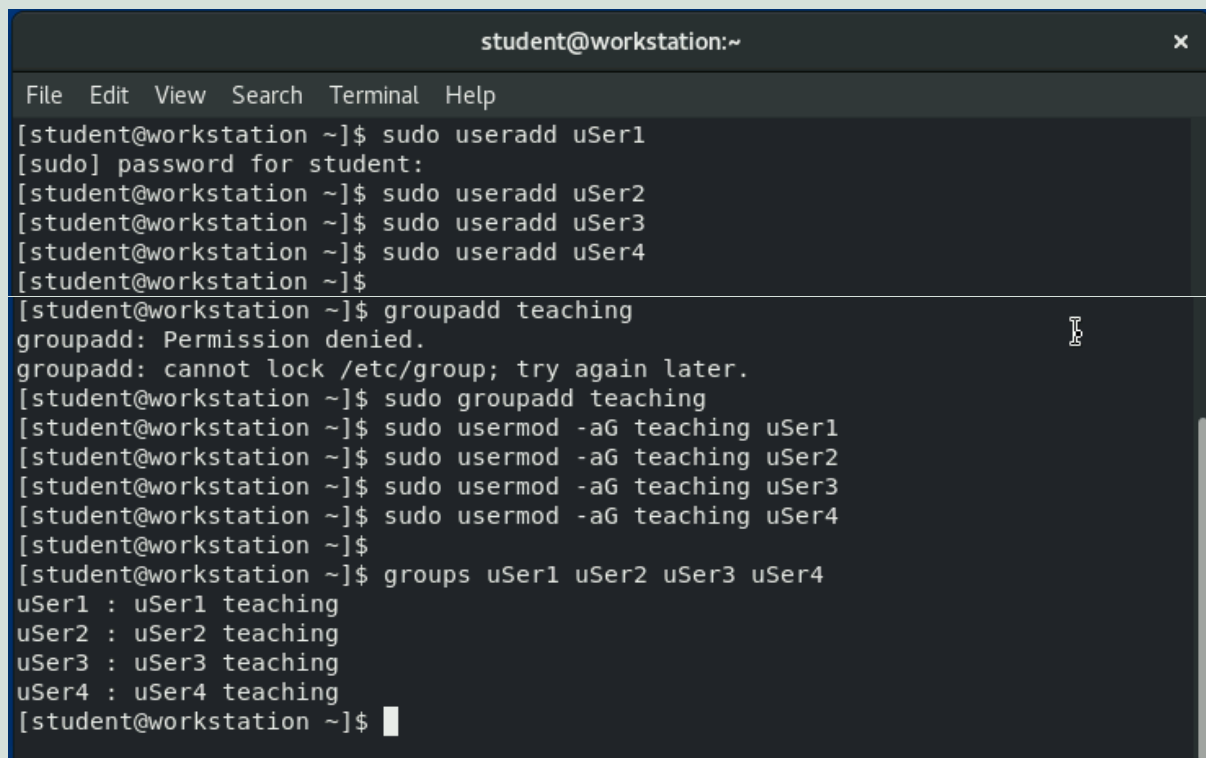
```
sudo useradd uSer1
sudo useradd uSer2
sudo useradd uSer3
sudo useradd uSer4
```

```
sudo groupadd teaching
```

```
sudo usermod -aG teaching uSer1
sudo usermod -aG teaching uSer2
sudo usermod -aG teaching uSer3
sudo usermod -aG teaching uSer4
```

```
groups uSer1 uSer2 uSer3 uSer4
```

Screenshot:-



```
student@workstation:~
File Edit View Search Terminal Help
[student@workstation ~]$ sudo useradd uSer1
[sudo] password for student:
[student@workstation ~]$ sudo useradd uSer2
[student@workstation ~]$ sudo useradd uSer3
[student@workstation ~]$ sudo useradd uSer4
[student@workstation ~]$
[student@workstation ~]$ groupadd teaching
groupadd: Permission denied.
groupadd: cannot lock /etc/group; try again later.
[student@workstation ~]$ sudo groupadd teaching
[student@workstation ~]$ sudo usermod -aG teaching uSer1
[student@workstation ~]$ sudo usermod -aG teaching uSer2
[student@workstation ~]$ sudo usermod -aG teaching uSer3
[student@workstation ~]$ sudo usermod -aG teaching uSer4
[student@workstation ~]$
[student@workstation ~]$ groups uSer1 uSer2 uSer3 uSer4
uSer1 : uSer1 teaching
uSer2 : uSer2 teaching
uSer3 : uSer3 teaching
uSer4 : uSer4 teaching
[student@workstation ~]$
```

3. The **attendance** directory contains four files **BOSS**, **CO**, **BCS** and **LA**. The group owner of all these files should also be **your_name**

Command:-

```
cd attendance
```

```
touch BOSS CO BCS LA
```

```
ls
```

```
sudo chgrp Dwij BOSS
```

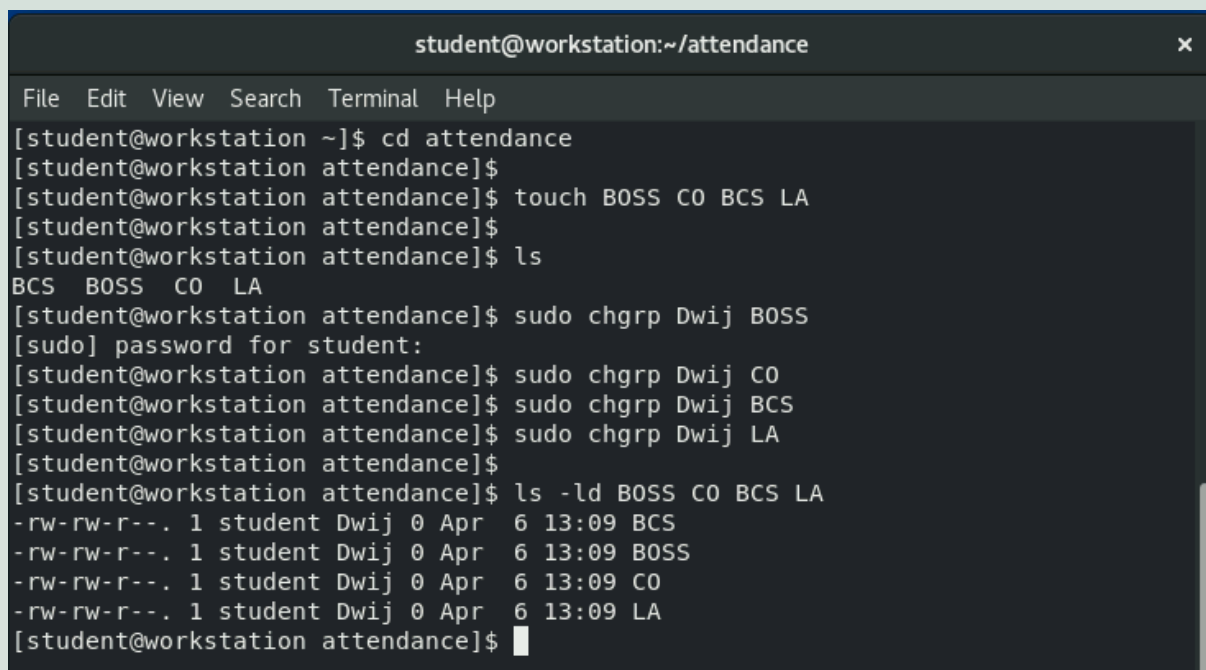
```
sudo chgrp Dwij CO
```

```
sudo chgrp Dwij BCS
```

```
sudo chgrp Dwij LA
```

```
ls -ld BOSS CO BCS LA
```

Screenshot:-



```
student@workstation:~/attendance
File Edit View Search Terminal Help
[student@workstation ~]$ cd attendance
[student@workstation attendance]$
[student@workstation attendance]$ touch BOSS CO BCS LA
[student@workstation attendance]$
[student@workstation attendance]$ ls
BCS BOSS CO LA
[student@workstation attendance]$ sudo chgrp Dwij BOSS
[sudo] password for student:
[student@workstation attendance]$ sudo chgrp Dwij CO
[student@workstation attendance]$ sudo chgrp Dwij BCS
[student@workstation attendance]$ sudo chgrp Dwij LA
[student@workstation attendance]$
[student@workstation attendance]$ ls -ld BOSS CO BCS LA
-rw-rw-r--. 1 student Dwij 0 Apr 6 13:09 BCS
-rw-rw-r--. 1 student Dwij 0 Apr 6 13:09 BOSS
-rw-rw-r--. 1 student Dwij 0 Apr 6 13:09 CO
-rw-rw-r--. 1 student Dwij 0 Apr 6 13:09 LA
[student@workstation attendance]$
```

4. Following mapping should be applied on users and files with write access, and the same should be the owners of respective files:

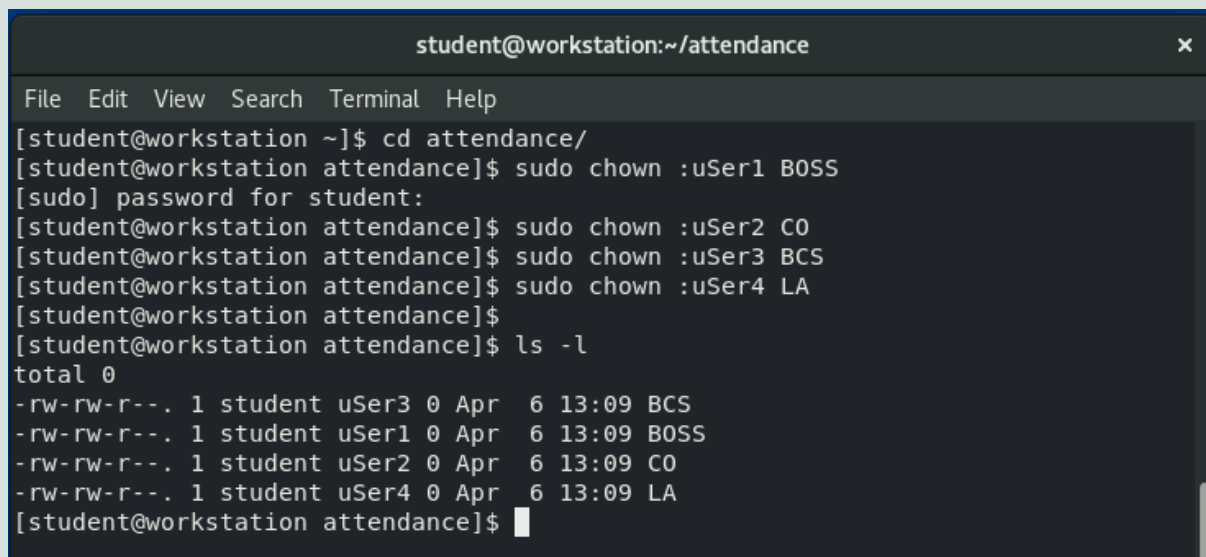
BOSS: user1
CO: user2
BCS: user3
LA: user4

Command:-

```
sudo chown :uSer1 BOSS  
sudo chown :uSer2 CO  
sudo chown :uSer3 BCS  
sudo chown :uSer4 LA
```

ls -l

Screenshot:-



```
student@workstation:~/attendance  
File Edit View Search Terminal Help  
[student@workstation ~]$ cd attendance/  
[student@workstation attendance]$ sudo chown :uSer1 BOSS  
[sudo] password for student:  
[student@workstation attendance]$ sudo chown :uSer2 CO  
[student@workstation attendance]$ sudo chown :uSer3 BCS  
[student@workstation attendance]$ sudo chown :uSer4 LA  
[student@workstation attendance]$  
[student@workstation attendance]$ ls -l  
total 0  
-rw-rw-r--. 1 student uSer3 0 Apr  6 13:09 BCS  
-rw-rw-r--. 1 student uSer1 0 Apr  6 13:09 BOSS  
-rw-rw-r--. 1 student uSer2 0 Apr  6 13:09 CO  
-rw-rw-r--. 1 student uSer4 0 Apr  6 13:09 LA  
[student@workstation attendance]$
```

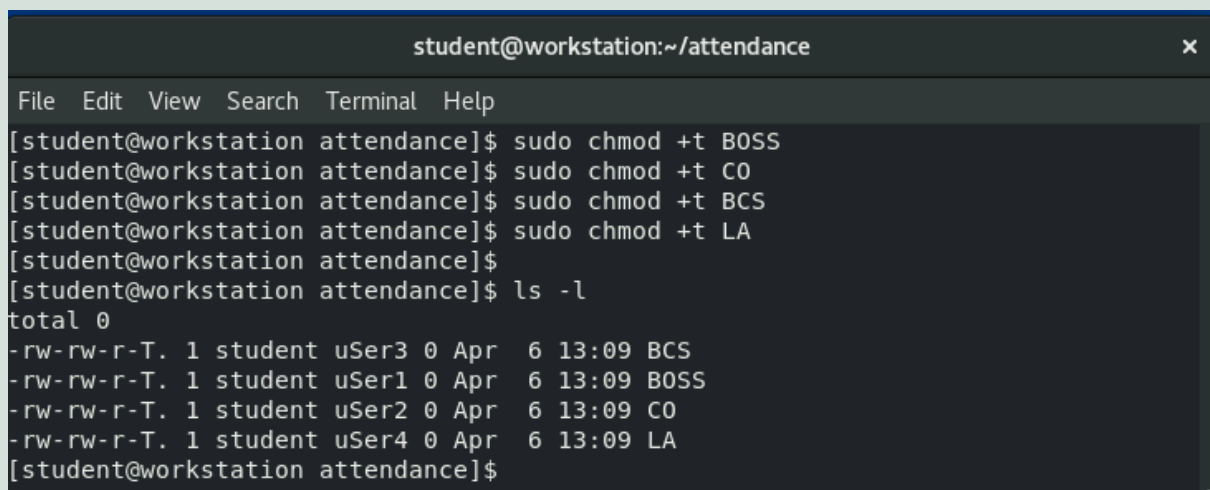
5. Only the owners of these files should be able to delete the files inside the attendance directory.

Command:-

```
sudo chmod +t BOSS
sudo chmod +t CO
sudo chmod +t BCS
sudo chmod +t LA
```

```
ls -l
```

Screenshot:-



```
student@workstation:~/attendance
File Edit View Search Terminal Help
[student@workstation attendance]$ sudo chmod +t BOSS
[student@workstation attendance]$ sudo chmod +t CO
[student@workstation attendance]$ sudo chmod +t BCS
[student@workstation attendance]$ sudo chmod +t LA
[student@workstation attendance]$
[student@workstation attendance]$ ls -l
total 0
-rw-rw-r-T. 1 student uSer3 0 Apr  6 13:09 BCS
-rw-rw-r-T. 1 student uSer1 0 Apr  6 13:09 BOSS
-rw-rw-r-T. 1 student uSer2 0 Apr  6 13:09 CO
-rw-rw-r-T. 1 student uSer4 0 Apr  6 13:09 LA
[student@workstation attendance]$
```