

UBUNTU COMMANDS

OPERATING SYSTEMS LABS



ASSIGNMENT # 01

Submitted By

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Submitted to

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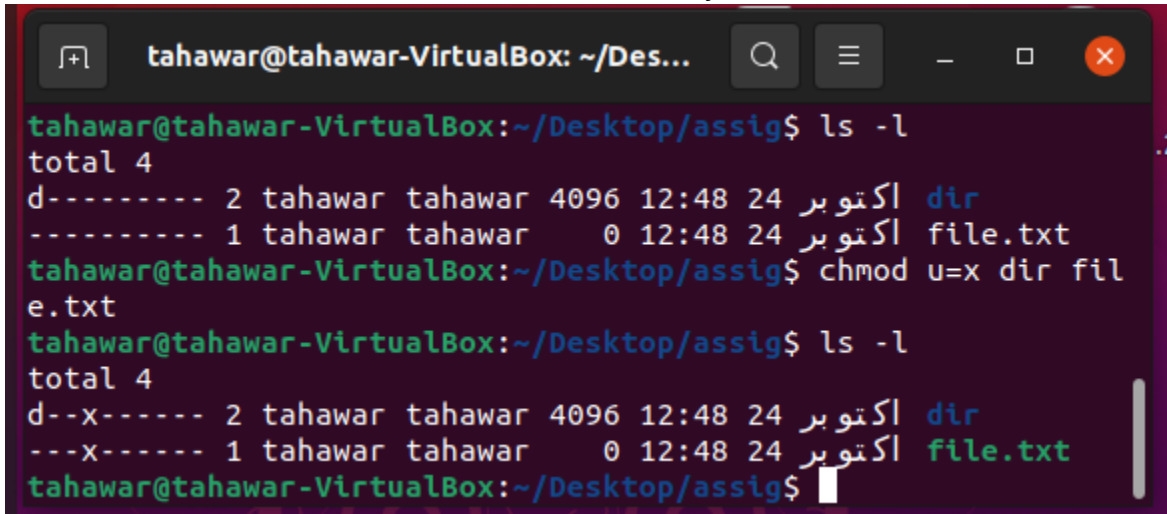
EMERGING SCINCES, PESHAWAR

Session 2019-2023

SYMBOLIC MODES

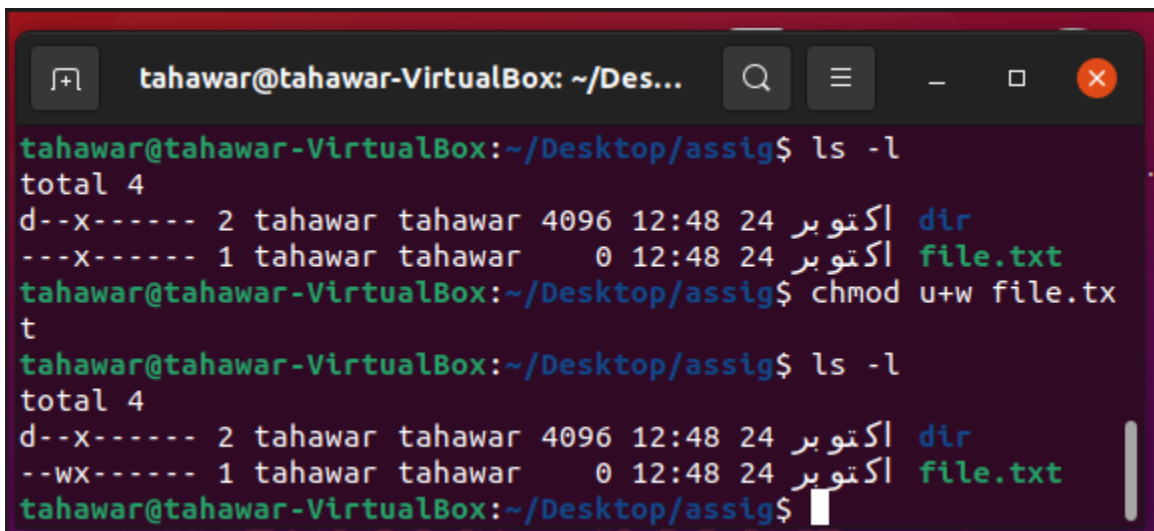
Owner:

- 1) To allow owner to execute file and directory.



```
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ chmod u=x dir file
e.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
---x----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$
```

- 2) To allow owner to write file.



```
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
---x----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ chmod u+w file.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
--wx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox: ~/Desktop/assig$
```

- 3) To give owner read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
--wx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod u+r dir file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
dr-x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 4) Give all permissions to owner.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
dr-x----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod u=rwx dir file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
drwx----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 5) Take all permissions from owner.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
drwx----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod u-rwx dir file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

Group:

- 1) To allow group to execute file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod g=x dir file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 2) To allow group to write file.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----wx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----wx--- 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod g+w file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----wx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----wx--- 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

3) To give group read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----wx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----wx--- 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod g+r file.txt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
---rwx--- 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

4) Give all permissions to group.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----rwx--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod g=rwx file.
txt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----rwx--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

5) Take all permissions from group.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----rwx--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod g-rwx file.
txt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

Others:

1) To allow others to execute file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
-----x 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o=x dor fil
e.txt
chmod: cannot access 'dor': No such file or directory
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o=x file.tx
t dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

2) To allow others to write file.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o+w file.tx
t
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----wx 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

3) To give others read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----wx 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o+r file.tx
t dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----r-x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----rwx 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

4) Give all permissions to others

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----r-x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----rwx 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o=rwx file.
txt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----rwx 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----rwx 1 tahawar tahawar 0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

5) Take all permissions from others.


```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----rwx 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-----rwx 1 tahawar tahawar  0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod o-rwx file.
txt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
----- 1 tahawar tahawar  0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

ABSOLUTE MODES

Owner:

- 1) To allow owner to execute file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
----- 1 tahawar tahawar  0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 100 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
--x----- 1 tahawar tahawar  0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 2) To allow owner to write file.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d--x----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
---x----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 200 file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-w----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
--w----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

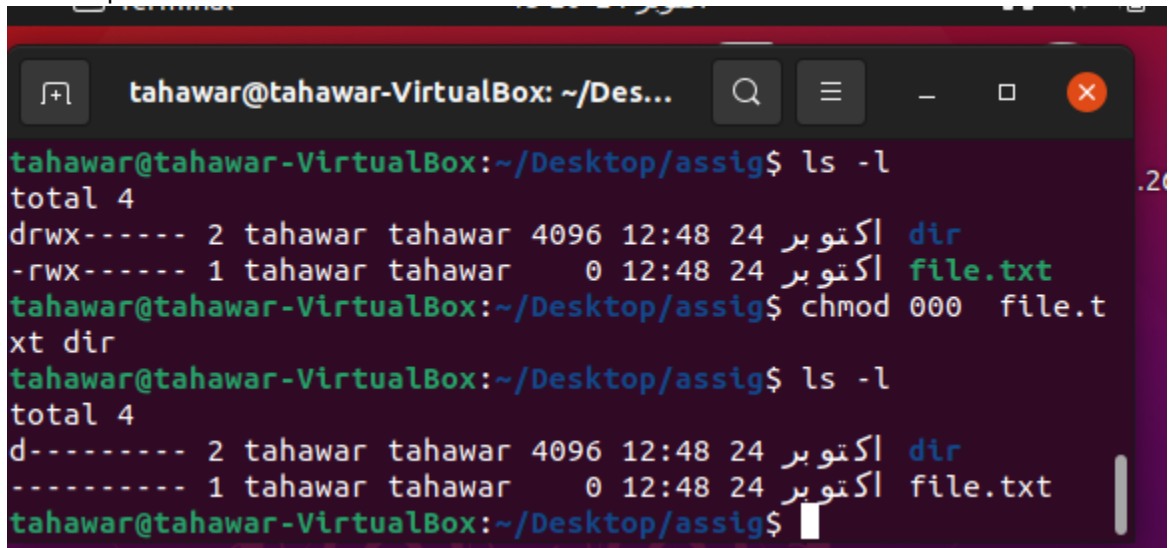
- 3) To give owner read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-w----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
--w----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 400 file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
dr----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-r----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 4) Give all permissions to owner.

```
Firefox Web Browser tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
dr----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-r----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 700 file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
drwx----- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

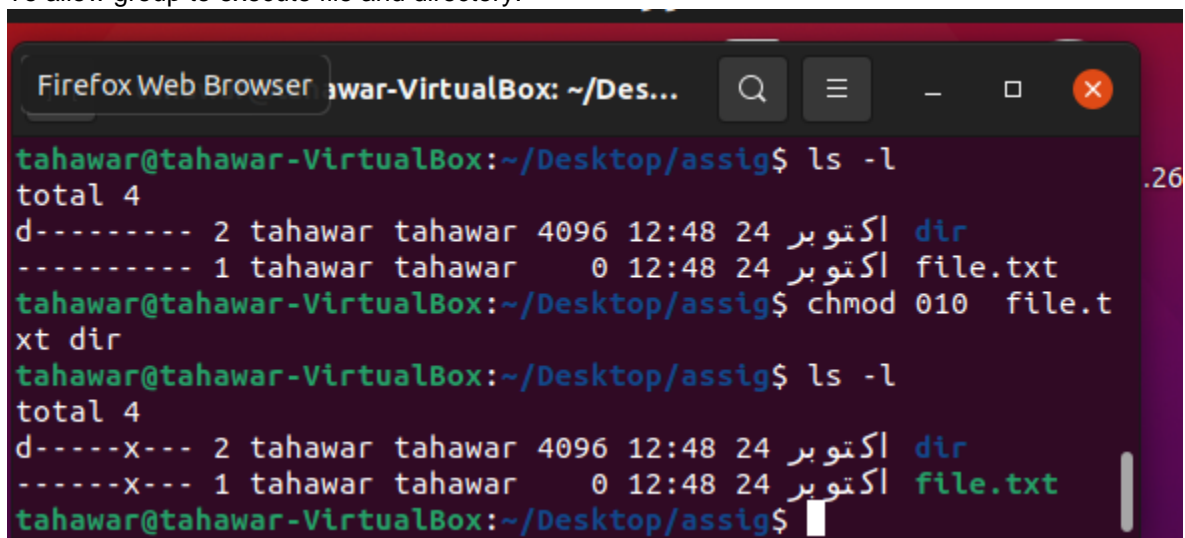
- 5) Take all permissions from owner.



```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
drwx----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-rwx----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 000 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

Group:

- 1) To allow group to execute file and directory.



```
Firefox Web Browser tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 010 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 2) To allow group to write file.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 020 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----w---- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----w--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

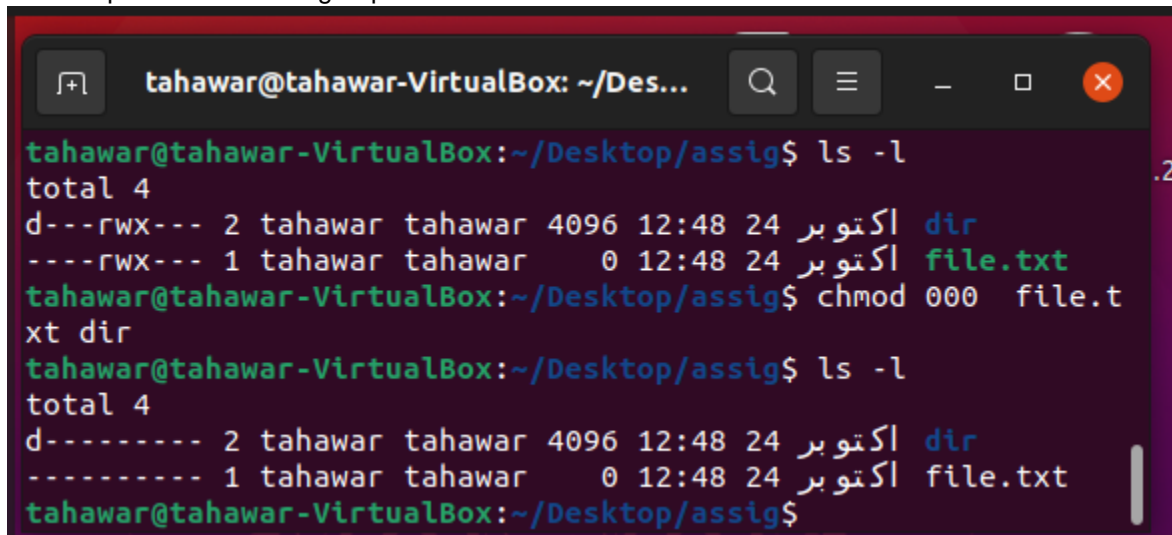
- 3) To give group read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----w---- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----w--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 040 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---r----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----r----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 4) Give all permissions to group.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---r----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----r----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 070 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
---rwx--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

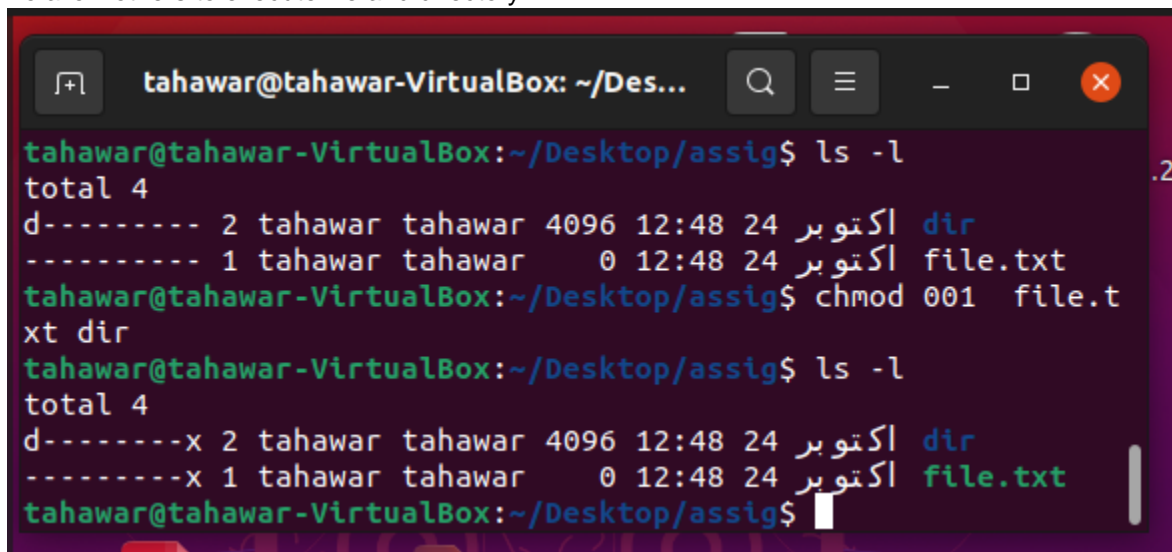
- 5) Take all permissions from group.



```
tahawar@tahawar-VirtualBox: ~/Desktop/assign$ ls -l
total 4
d---rwx--- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
---rwx--- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$ chmod 000 file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
----- 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$
```

Others:

- 1) To allow others to execute file and directory.



```
tahawar@tahawar-VirtualBox: ~/Desktop/assign$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$ chmod 001 file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اکتوبر dir
-----x 1 tahawar tahawar    0 12:48 24 اکتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assign$
```

- 2) To allow others to write file.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----x 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-----x 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 002 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----w- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-----w- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 3) To give others read permissions on file and directory.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----w- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-----w- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 004 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----r-- 2 tahawar tahawar 4096 12:48 24 اكتوبر dir
-----r-- 1 tahawar tahawar    0 12:48 24 اكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 4) Give all permissions to others

```
es terminal 13:51 24 أكتوبر
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----r-- 2 tahawar tahawar 4096 12:48 24 أكتوبر dir
-----r-- 1 tahawar tahawar 0 12:48 24 أكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 007 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----rwx 2 tahawar tahawar 4096 12:48 24 أكتوبر dir
-----rwx 1 tahawar tahawar 0 12:48 24 أكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```

- 5) Take all permissions from others.

```
tahawar@tahawar-VirtualBox: ~/Des...
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d-----rwx 2 tahawar tahawar 4096 12:48 24 أكتوبر dir
-----rwx 1 tahawar tahawar 0 12:48 24 أكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$ chmod 000 file.t
xt dir
tahawar@tahawar-VirtualBox:~/Desktop/assig$ ls -l
total 4
d----- 2 tahawar tahawar 4096 12:48 24 أكتوبر dir
----- 1 tahawar tahawar 0 12:48 24 أكتوبر file.txt
tahawar@tahawar-VirtualBox:~/Desktop/assig$
```