

# **CHMOD COMMANDS**

## **OPERATING SYSTEMS LAB**



### **ASSIGNMENT # 02**

*Submitted by*

**MUHAMMAD USMAN**

**(19P-0116)**

*Submitted to*

**MR. MUHAMMAD ABDULLAH**

**(INSTRUCTOR CS)**

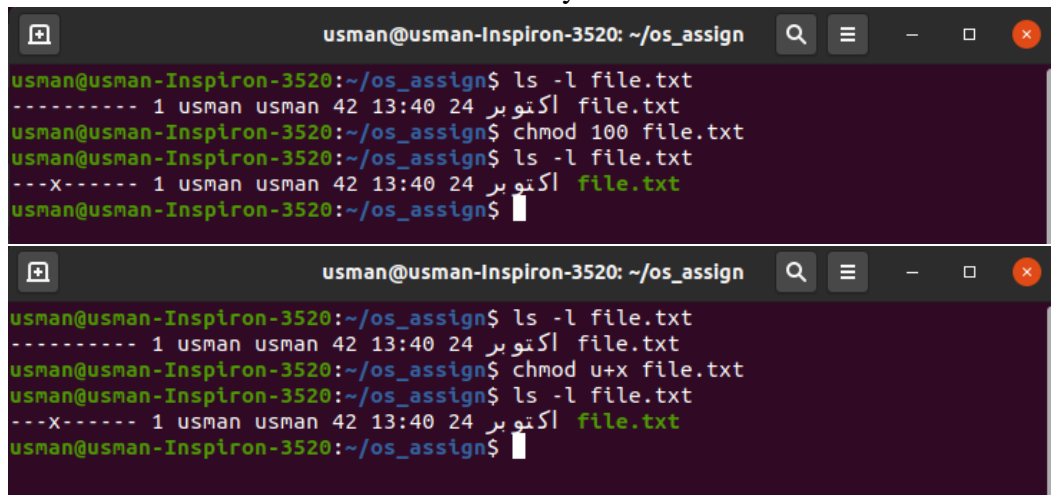
**DEPARTMENT OF COMPUTER SCIENCE  
FAST NATIONAL UNIVERSITY OF COMPUTER AND  
EMERGING SCIENCES, PESHAWAR**

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**Q No.1:** There are two methods to give permissions to files and directories in Ubuntu namely absolute (numeric) and symbolic modes. You are required to perform the following operations using the both of the methods. Screenshots of the practical implementation should be submitted in PDF file.

**Owner:**

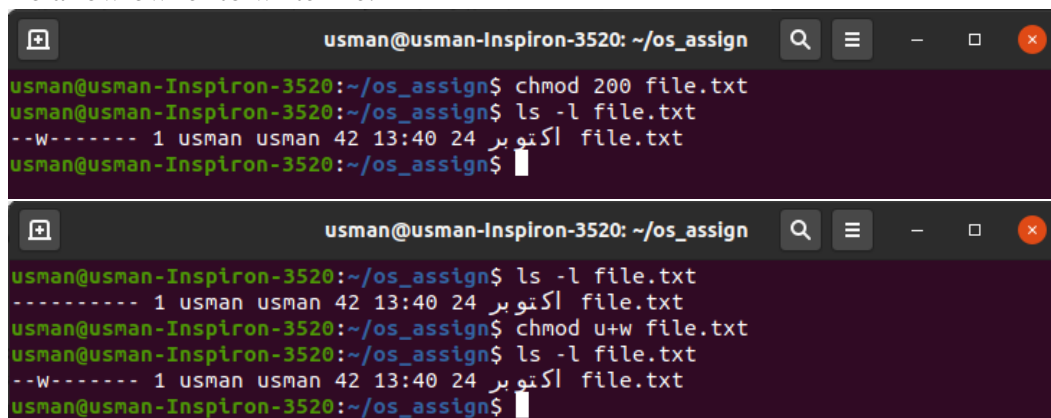
- 1) To allow owner to execute file and directory.



```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 100 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
---x----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod u+x file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
---x----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

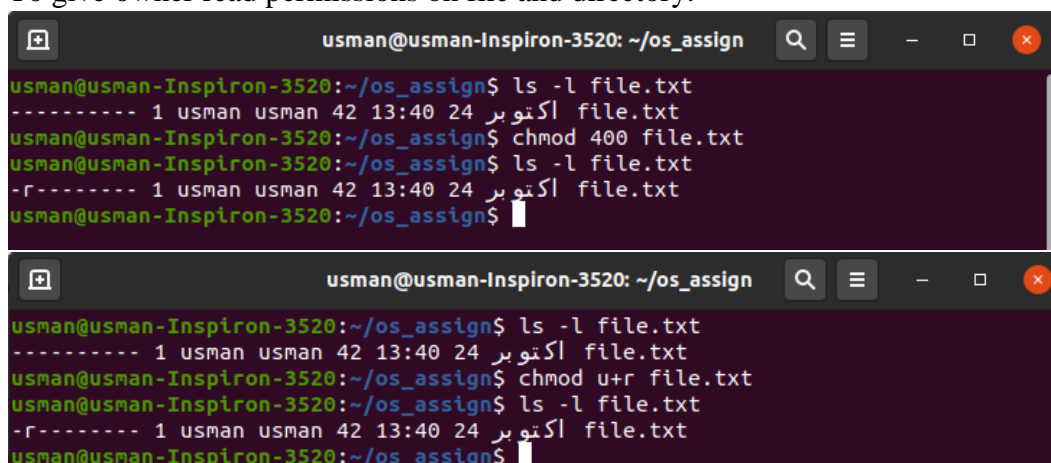
- 2) To allow owner to write file.



```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ chmod 200 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
--w----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod u+w file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
--w----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

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



```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 400 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-r----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod u+r file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-r----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 4) Give all permissions to owner.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 700 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-rwx----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod u+rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-rwx----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 5) Take all permissions from owner.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-rwx----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 000 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-rwx----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod u-rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

## Group:

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

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 010 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----x--- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod g+x file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----x--- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 2) To allow group to write file.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 020 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----w---- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod g+w file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----w---- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

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

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 040 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----r----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod g+r file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----r----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 4) Give all permissions to group.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 070 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----rwx--- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod g+rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----rwx--- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 5) Take all permissions from group.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----rwx--- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 000 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----rwx--- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod g-rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

Others:

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

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 001 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----x 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod o+x file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----x 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

- 2) To allow others to write file.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 002 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----w- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$

usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod o+w file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----w- 1 usman usman 42 13:40 24 اكتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

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

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 004 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----r-- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod o+r file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----r-- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

4) Give all permissions to others.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 007 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----rwx 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod o+rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----rwx 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

5) Take all permissions from others.

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----rwx 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod 000 file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```

```
usman@usman-Inspiron-3520: ~/os_assign
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
-----rwx 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$ chmod o-rwx file.txt
usman@usman-Inspiron-3520:~/os_assign$ ls -l file.txt
----- 1 usman usman 42 13:40 24 اکتوبر file.txt
usman@usman-Inspiron-3520:~/os_assign$
```