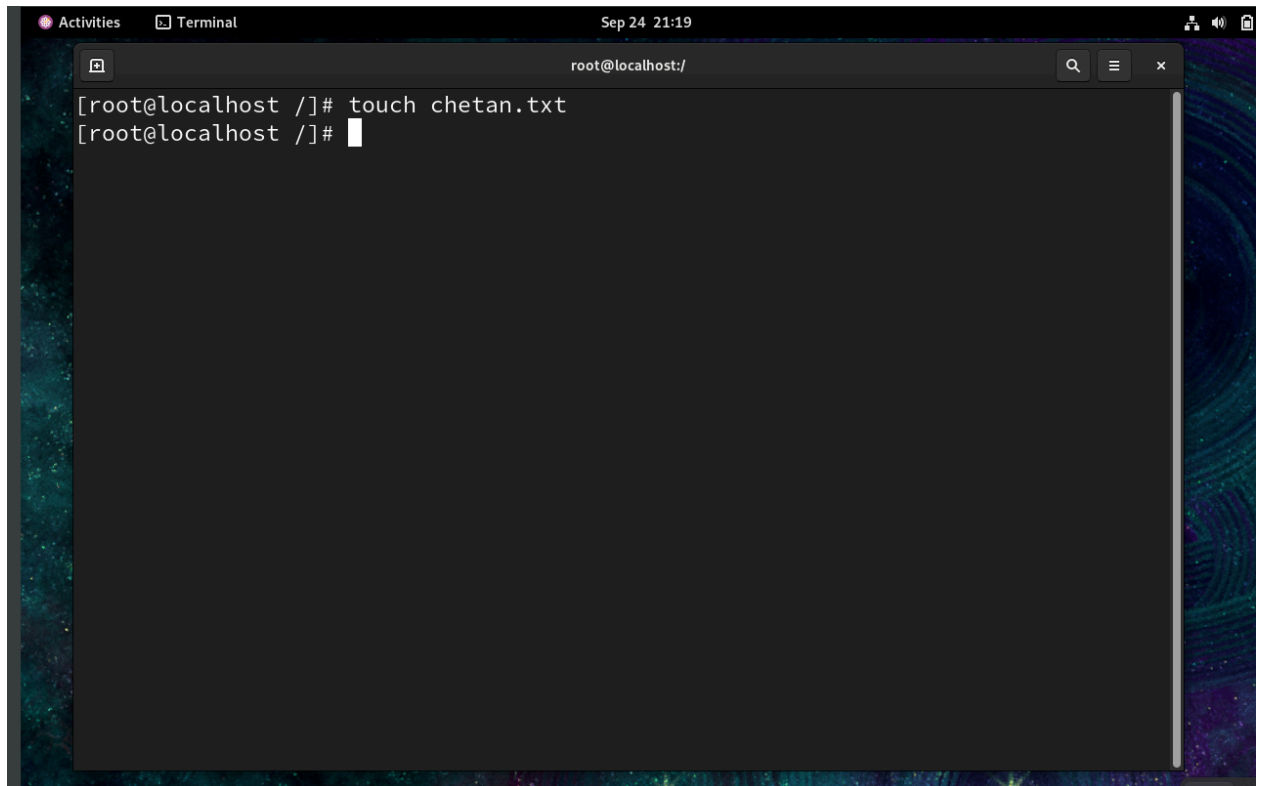


Q.4 Use chmod command to change the permission of newly created file

1. Change the permission to rwxrwxr\_\_
2. First create the file by using touch command

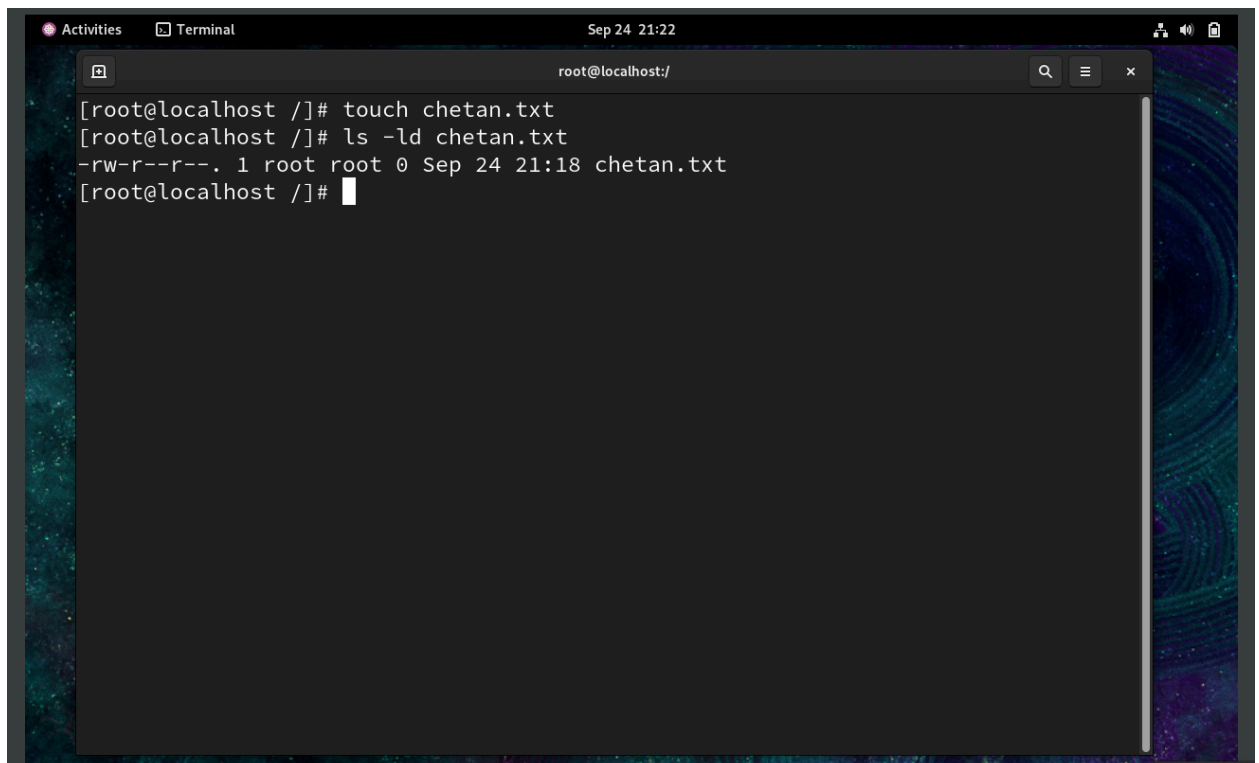
A terminal window titled "Terminal" with a search icon, menu icon, and close button. The window shows the command prompt "root@localhost:/" and the execution of the "touch chetan.txt" command. The prompt returns to "root@localhost:/" with a cursor. The terminal has a dark background and a vertical scrollbar on the right.

```
root@localhost:/  
[root@localhost /]# touch chetan.txt  
[root@localhost /]#
```

3.As you can see the file has been created

```
[root@localhost /]# ls
afs  boot  chetan.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev  home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost /]#
```

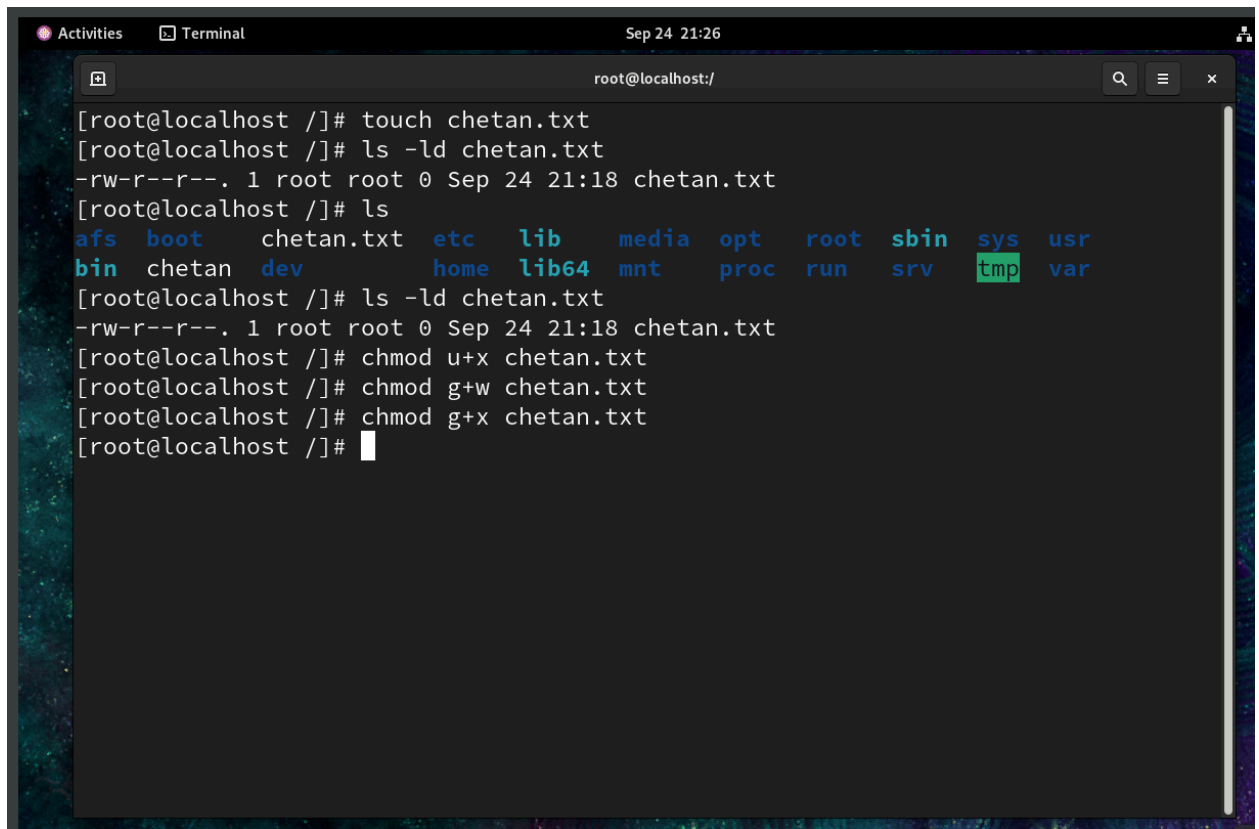
4.Use ls -ld command to check the file default permission

A terminal window titled 'Terminal' with a search bar and window controls. The prompt is 'root@localhost:/' and the background is a dark space-themed wallpaper. The terminal shows the following commands and output:

```
[root@localhost /]# touch chetan.txt
[root@localhost /]# ls -ld chetan.txt
-rw-r--r--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost /]#
```

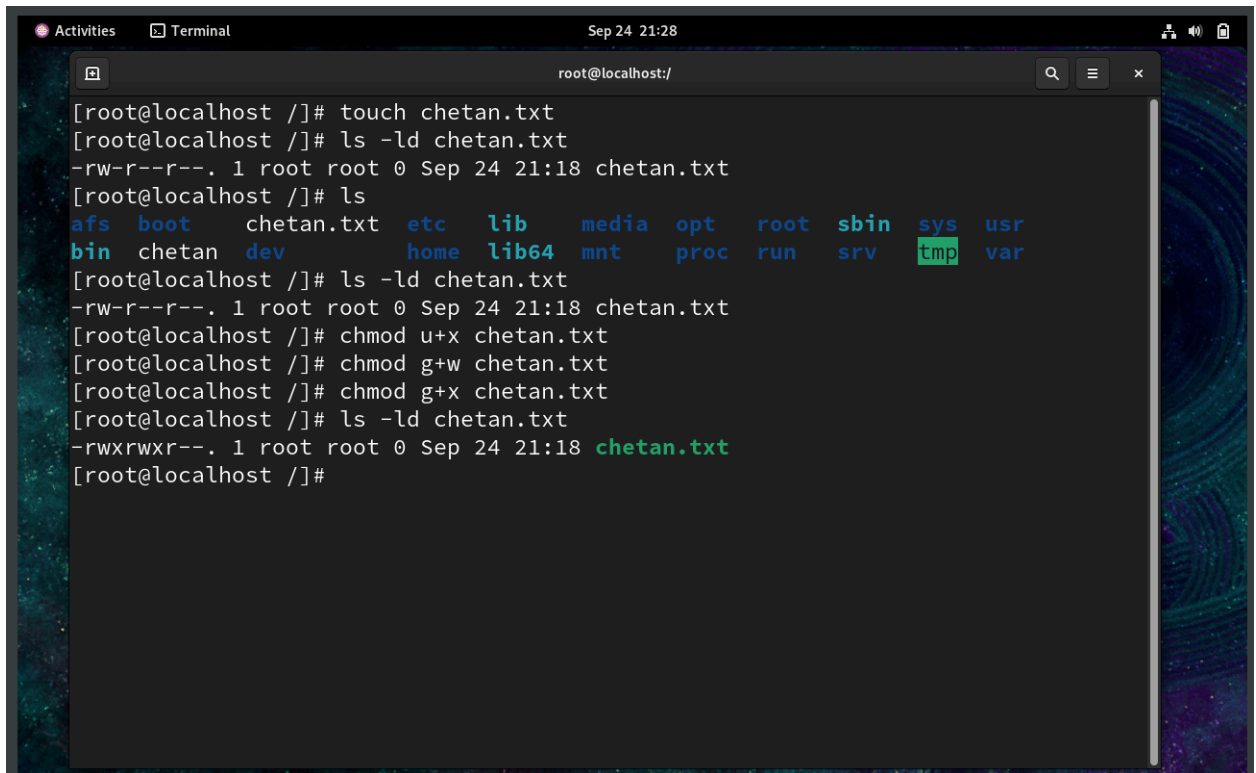
The terminal window displays the execution of the 'touch' command to create 'chetan.txt' and the 'ls -ld' command to check its permissions. The output shows the file is owned by root, has permissions -rw-r--r--., and was created on Sep 24 at 21:18.

5. We have to use chmod command to change the file permission



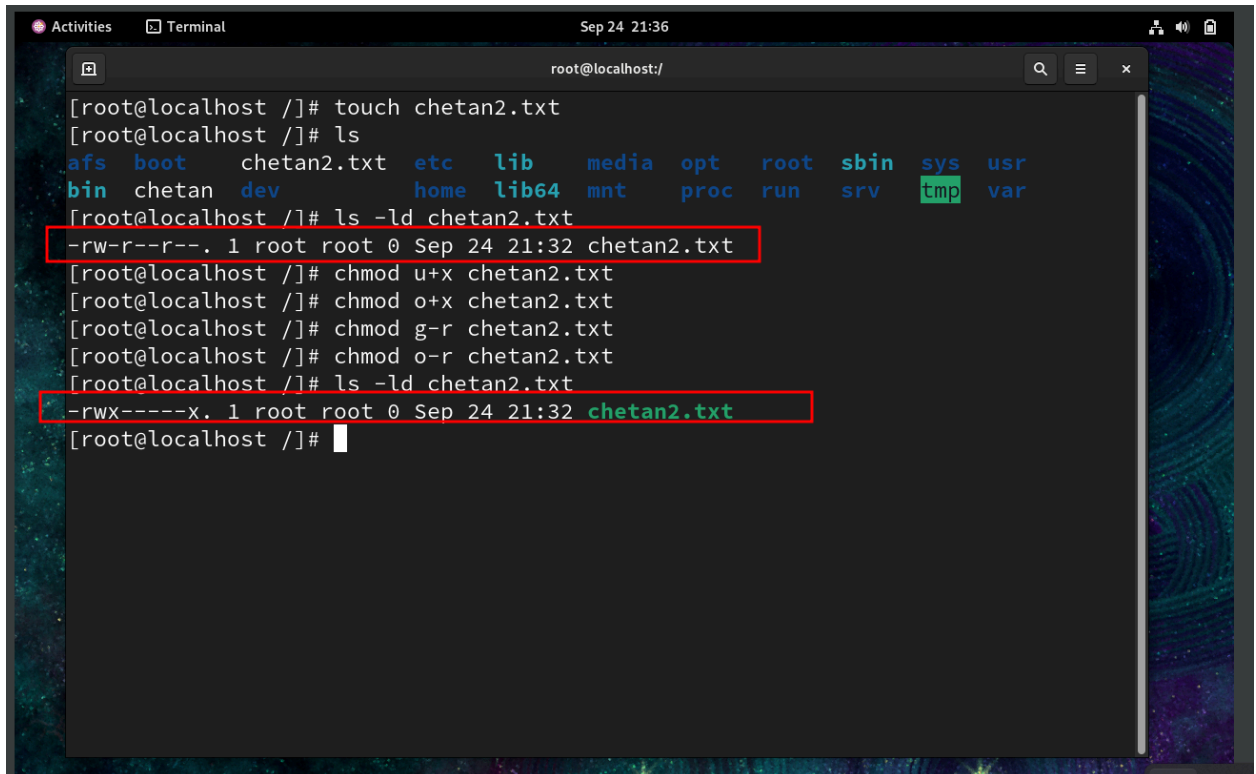
```
[root@localhost ~]# touch chetan.txt
[root@localhost ~]# ls -ld chetan.txt
-rw-r--r--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost ~]# ls
afs  boot  chetan.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev      home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost ~]# ls -ld chetan.txt
-rw-r--r--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost ~]# chmod u+x chetan.txt
[root@localhost ~]# chmod g+w chetan.txt
[root@localhost ~]# chmod g+x chetan.txt
[root@localhost ~]#
```

6. As you can see the file permission has been changed



```
[root@localhost ~]# touch chetan.txt
[root@localhost ~]# ls -ld chetan.txt
-rw-r--r--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost ~]# ls
afs  boot  chetan.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev      home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost ~]# ls -ld chetan.txt
-rw-r--r--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost ~]# chmod u+x chetan.txt
[root@localhost ~]# chmod g+w chetan.txt
[root@localhost ~]# chmod g+x chetan.txt
[root@localhost ~]# ls -ld chetan.txt
-rwxrwxr--. 1 root root 0 Sep 24 21:18 chetan.txt
[root@localhost ~]#
```

## 7. Change the permission to rwx\_\_\_\_x

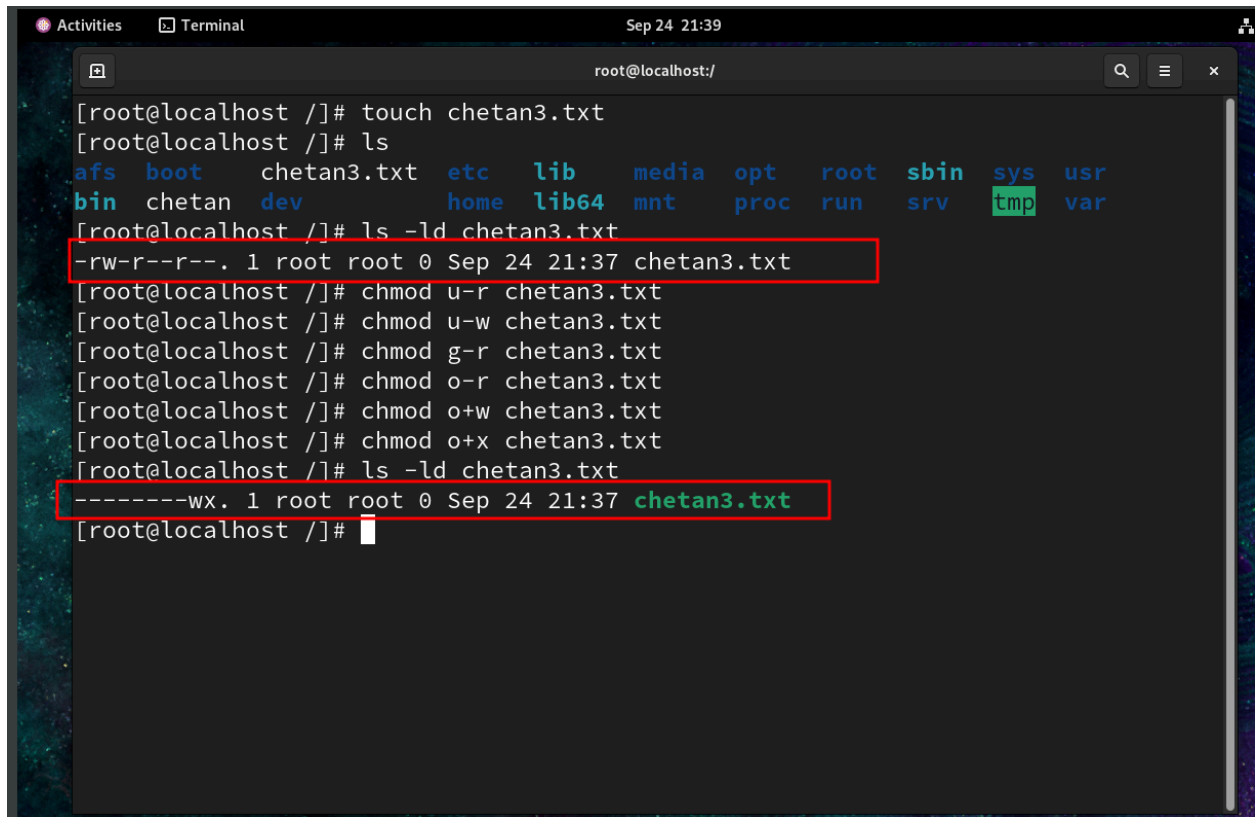


```
Activities Terminal Sep 24 21:36
root@localhost:/
[root@localhost /]# touch chetan2.txt
[root@localhost /]# ls
afs  boot  chetan2.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev  home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost /]# ls -ld chetan2.txt
-rw-r--r--. 1 root root 0 Sep 24 21:32 chetan2.txt
[root@localhost /]# chmod u+x chetan2.txt
[root@localhost /]# chmod o+x chetan2.txt
[root@localhost /]# chmod g-r chetan2.txt
[root@localhost /]# chmod o-r chetan2.txt
[root@localhost /]# ls -ld chetan2.txt
-rwx-----x. 1 root root 0 Sep 24 21:32 chetan2.txt
[root@localhost /]#
```

The image shows a terminal window with a dark background and a colorful, abstract pattern on the right side. The terminal output shows the following sequence of commands and their results:

- `touch chetan2.txt`: Creates the file `chetan2.txt`.
- `ls`: Lists the contents of the current directory, showing `chetan2.txt` among other system directories.
- `ls -ld chetan2.txt`: Shows the initial permissions of `chetan2.txt` as `-rw-r--r--`.
- `chmod u+x chetan2.txt`: Adds execute permission for the user.
- `chmod o+x chetan2.txt`: Adds execute permission for others.
- `chmod g-r chetan2.txt`: Removes read permission for the group.
- `chmod o-r chetan2.txt`: Removes read permission for others.
- `ls -ld chetan2.txt`: Shows the final permissions of `chetan2.txt` as `-rwx-----x`.

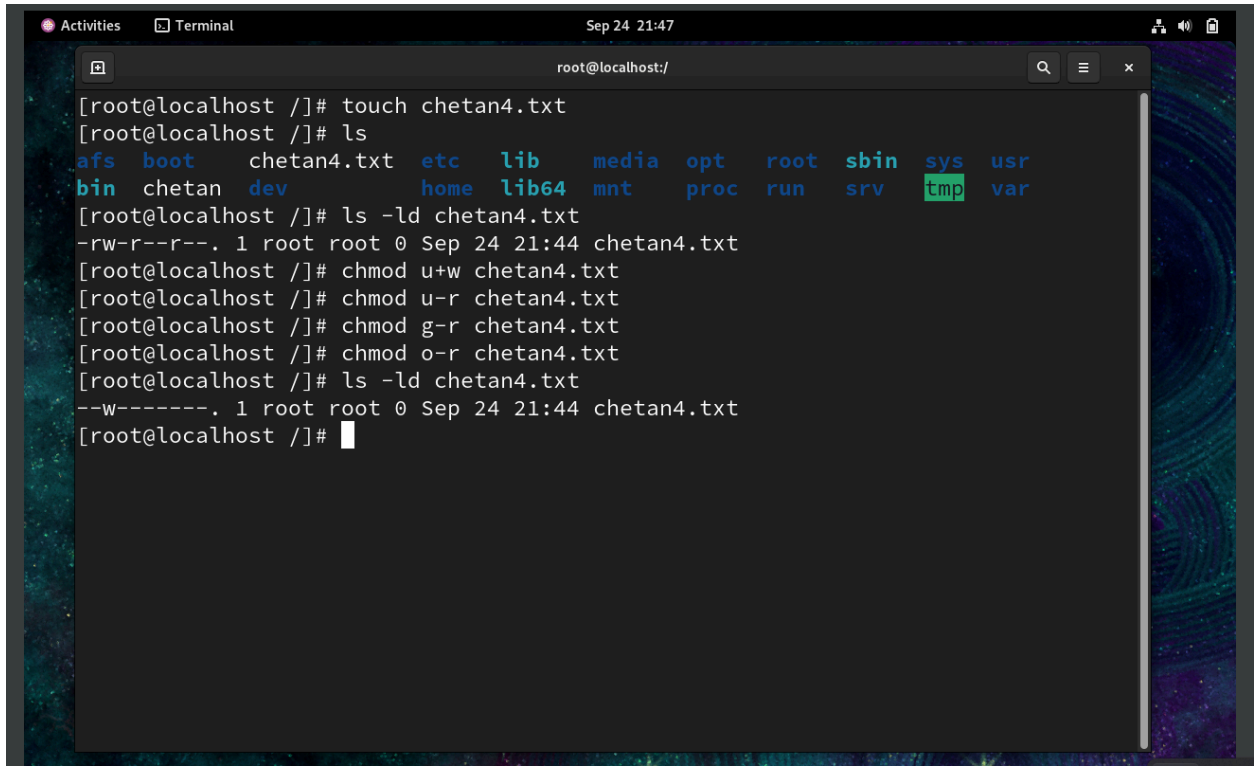
8. Change the permission to \_\_\_\_\_wx



A terminal window titled 'Terminal' with a search icon, menu icon, and close button. The window shows a root user at localhost. The user creates a file 'chetan3.txt' using 'touch'. Then, they list the directory contents, showing 'chetan3.txt' among other system directories. Next, they use 'ls -ld' to view the file's permissions, which are '-rw-r--r--'. Then, they use 'chmod' to change permissions: 'u-r' (removes owner read), 'u-w' (removes owner write), 'g-r' (removes group read), 'o-r' (removes other read), 'o+w' (adds other write), and 'o+x' (adds other execute). Finally, they use 'ls -ld' again to show the updated permissions as '-----wx'. The file name 'chetan3.txt' is highlighted in green in the final output line.

```
[root@localhost ~]# touch chetan3.txt
[root@localhost ~]# ls
afs  boot  chetan3.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev  home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost ~]# ls -ld chetan3.txt
-rw-r--r--. 1 root root 0 Sep 24 21:37 chetan3.txt
[root@localhost ~]# chmod u-r chetan3.txt
[root@localhost ~]# chmod u-w chetan3.txt
[root@localhost ~]# chmod g-r chetan3.txt
[root@localhost ~]# chmod o-r chetan3.txt
[root@localhost ~]# chmod o+w chetan3.txt
[root@localhost ~]# chmod o+x chetan3.txt
[root@localhost ~]# ls -ld chetan3.txt
-----wx. 1 root root 0 Sep 24 21:37 chetan3.txt
[root@localhost ~]#
```

## 9. Give write permission to the owner

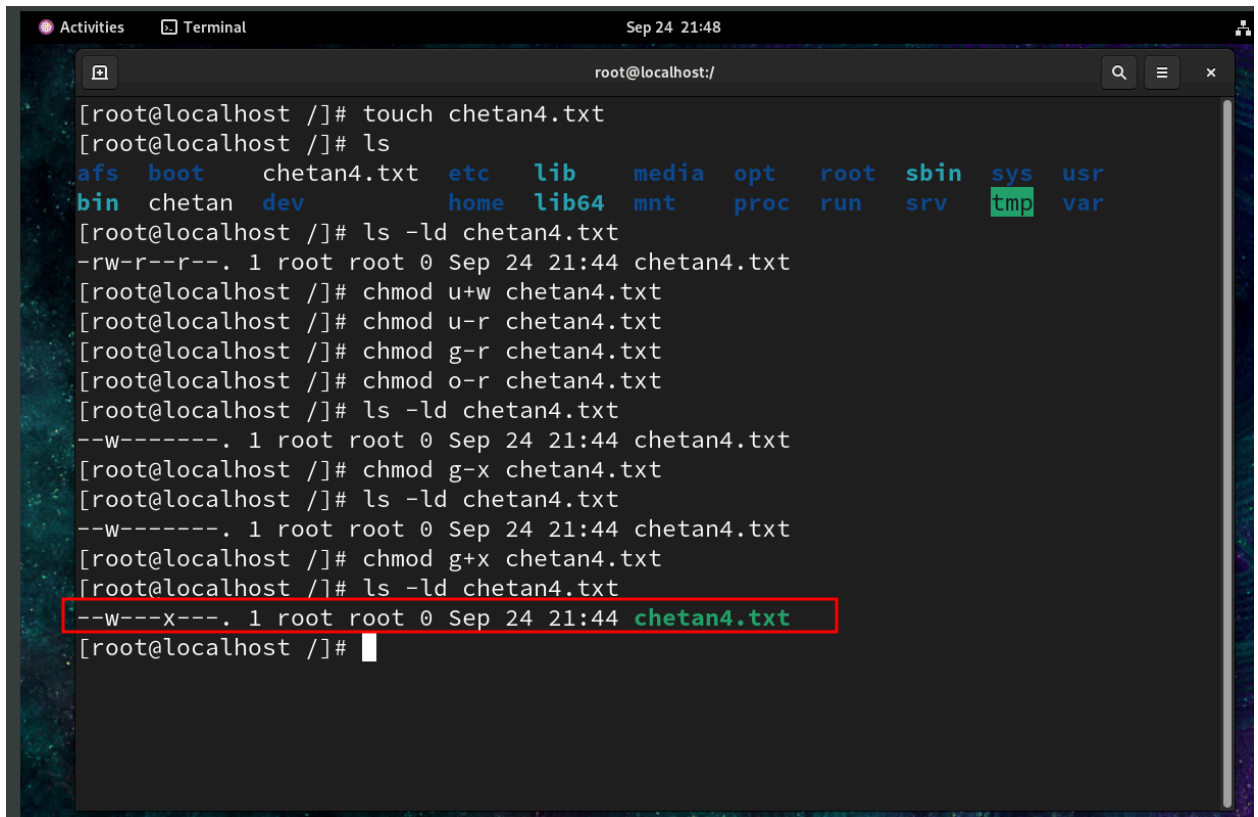


```
[root@localhost ~]# touch chetan4.txt
[root@localhost ~]# ls
afs  boot  chetan4.txt  etc  lib  media  opt  root  sbin  sys  usr
bin  chetan  dev  home  lib64  mnt  proc  run  srv  tmp  var
[root@localhost ~]# ls -ld chetan4.txt
-rw-r--r--. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost ~]# chmod u+w chetan4.txt
[root@localhost ~]# chmod u-r chetan4.txt
[root@localhost ~]# chmod g-r chetan4.txt
[root@localhost ~]# chmod o-r chetan4.txt
[root@localhost ~]# ls -ld chetan4.txt
--w-----. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost ~]#
```

The image shows a terminal window titled "Terminal" with the date and time "Sep 24 21:47". The user is logged in as root at localhost. The terminal shows the following commands and output:

- `touch chetan4.txt`: Creates the file `chetan4.txt`.
- `ls`: Lists the contents of the current directory, showing various system directories and the newly created `chetan4.txt`.
- `ls -ld chetan4.txt`: Shows the permissions of `chetan4.txt` as `-rw-r--r--. 1 root root 0 Sep 24 21:44 chetan4.txt`.
- `chmod u+w chetan4.txt`: Adds write permission for the owner.
- `chmod u-r chetan4.txt`: Removes read permission for the owner.
- `chmod g-r chetan4.txt`: Removes read permission for the group.
- `chmod o-r chetan4.txt`: Removes read permission for others.
- `ls -ld chetan4.txt`: Shows the updated permissions of `chetan4.txt` as `--w-----. 1 root root 0 Sep 24 21:44 chetan4.txt`.

## 10. Give execute permission to the group owner



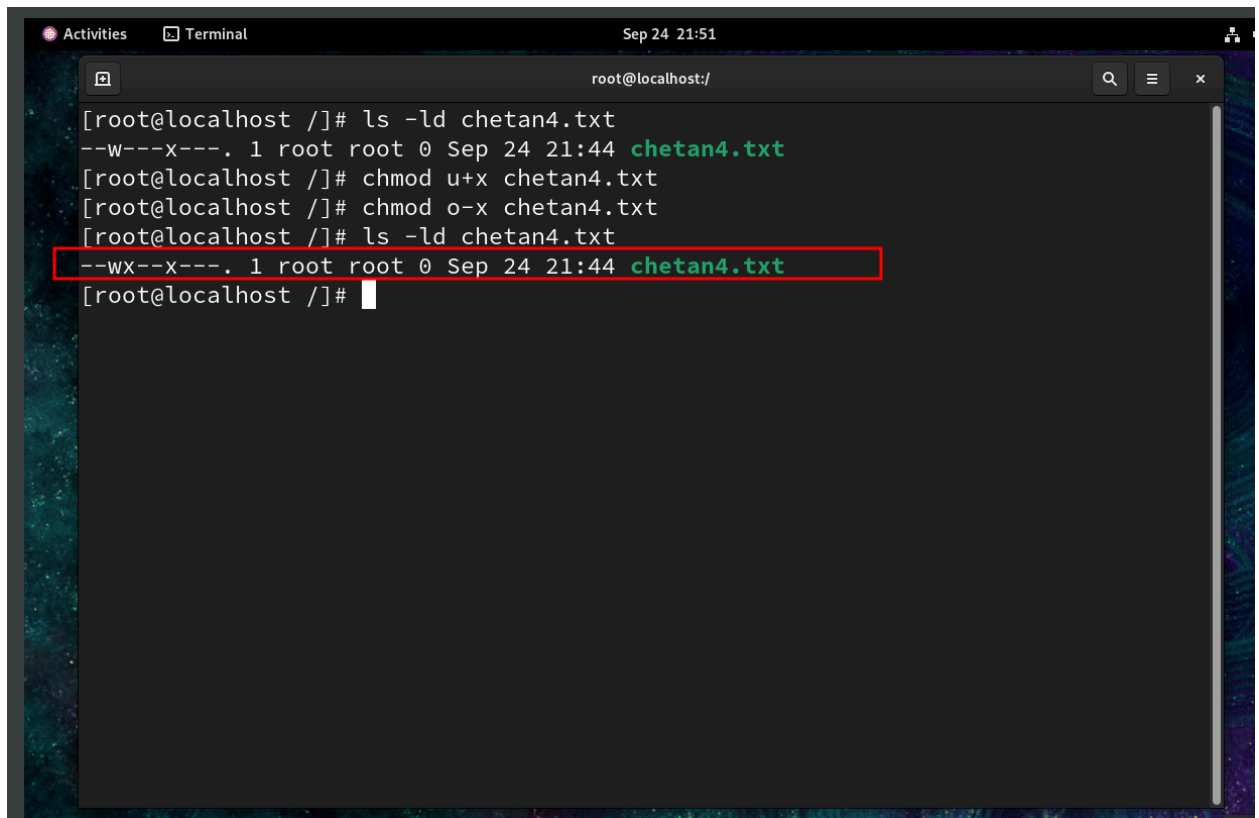
```
Activities Terminal Sep 24 21:48
root@localhost:/

[root@localhost /]# touch chetan4.txt
[root@localhost /]# ls
afs boot chetan4.txt etc lib media opt root sbin sys usr
bin chetan dev home lib64 mnt proc run srv tmp var
[root@localhost /]# ls -ld chetan4.txt
-rw-r--r--. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]# chmod u+w chetan4.txt
[root@localhost /]# chmod u-r chetan4.txt
[root@localhost /]# chmod g-r chetan4.txt
[root@localhost /]# chmod o-r chetan4.txt
[root@localhost /]# ls -ld chetan4.txt
--w-----. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]# chmod g-x chetan4.txt
[root@localhost /]# ls -ld chetan4.txt
--w-----. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]# chmod g+x chetan4.txt
[root@localhost /]# ls -ld chetan4.txt
--w---x---. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]#
```

The terminal window shows the process of creating a file named `chetan4.txt` and then modifying its permissions. The initial permissions are `-rw-r--r--`. The user then removes permissions for the user, group, and others, resulting in `--w-----`. Finally, the user adds execute permission for the group, resulting in `--w---x---`. The final line of the terminal output is highlighted with a red box.



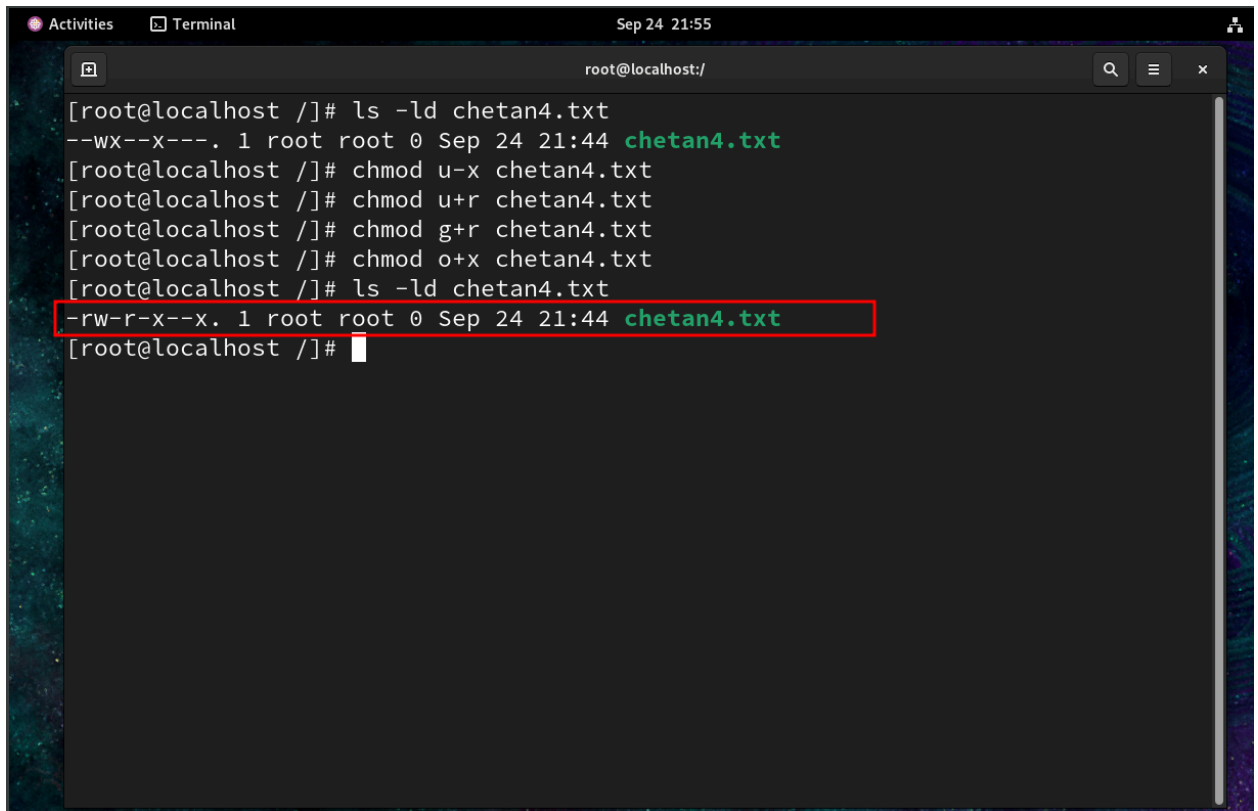
## 11. Remove execute permission to others



A terminal window titled "Terminal" with a search icon, menu icon, and close icon in the top right. The window shows a series of commands and their outputs. The first command is `ls -ld chetan4.txt`, which outputs `--w---x---. 1 root root 0 Sep 24 21:44 chetan4.txt`. The second command is `chmod u+x chetan4.txt`. The third command is `chmod o-x chetan4.txt`. The fourth command is `ls -ld chetan4.txt`, which outputs `--wx--x---. 1 root root 0 Sep 24 21:44 chetan4.txt`. This output line is highlighted with a red rectangular box. The prompt `[root@localhost /]#` is visible at the end of the line.

```
[root@localhost /]# ls -ld chetan4.txt
--w---x---. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]# chmod u+x chetan4.txt
[root@localhost /]# chmod o-x chetan4.txt
[root@localhost /]# ls -ld chetan4.txt
--wx--x---. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /]#
```

12. Set permission as owner =rw, group owner=rx, others=x

A terminal window titled "Terminal" with a timestamp of "Sep 24 21:55". The prompt is "root@localhost:/". The user enters the command "ls -ld chetan4.txt", which outputs "--wx--x---. 1 root root 0 Sep 24 21:44 chetan4.txt". Then, the user enters a series of "chmod" commands: "chmod u-x chetan4.txt", "chmod u+r chetan4.txt", "chmod g+r chetan4.txt", and "chmod o+x chetan4.txt". Finally, the user enters "ls -ld chetan4.txt" again, and the output "-rw-r-x--x. 1 root root 0 Sep 24 21:44 chetan4.txt" is highlighted with a red rectangular box. The prompt is now "root@localhost /)#".

```
[root@localhost /)# ls -ld chetan4.txt
--wx--x---. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /)# chmod u-x chetan4.txt
[root@localhost /)# chmod u+r chetan4.txt
[root@localhost /)# chmod g+r chetan4.txt
[root@localhost /)# chmod o+x chetan4.txt
[root@localhost /)# ls -ld chetan4.txt
-rw-r-x--x. 1 root root 0 Sep 24 21:44 chetan4.txt
[root@localhost /)#
```