

Assignment – 2

Permissions and Ownership

1 Create a file named secure.txt

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ touch secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ ls -lh
total 8.0K
drwxrwxr-x 2 ubuntu ubuntu 4.0K Jan 13 09:52 backup
drwxrwxr-x 2 ubuntu ubuntu 4.0K Jan 13 09:37 files
-rw-rw-r-- 1 ubuntu ubuntu 0 Jan 13 10:18 secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$
```

2. Set permissions so that:

- Owner → read/write
- Group → read only
- Others → no access

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ chmod 640 secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ ls -l
total 8
drwxrwxr-x 2 ubuntu ubuntu 4096 Jan 13 09:52 backup
drwxrwxr-x 2 ubuntu ubuntu 4096 Jan 13 09:37 files
-rw-r----- 1 ubuntu ubuntu 0 Jan 13 10:18 secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$
```

3. Change ownership of the file to another user.

```
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ sudo useradd -m harsh
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ cd ~
ubuntu@ip-172-31-16-28:~$ ls
linux_lab_day1  linux_practice
ubuntu@ip-172-31-16-28:~$ cd ..
ubuntu@ip-172-31-16-28:/home$ ls
harsh  ubuntu
ubuntu@ip-172-31-16-28:/home$ pwd
/home
ubuntu@ip-172-31-16-28:/home$ cd ubuntu/
ubuntu@ip-172-31-16-28:~$ ls
linux_lab_day1  linux_practice
ubuntu@ip-172-31-16-28:~$ cd linux_
linux_lab_day1/ linux_practice/
ubuntu@ip-172-31-16-28:~$ cd linux_practice
ubuntu@ip-172-31-16-28:~/linux_practice$ cd day1
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ sudo chown harsh secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$ ls -l
total 8
drwxrwxr-x 2 ubuntu ubuntu 4096 Jan 13 09:52 backup
drwxrwxr-x 2 ubuntu ubuntu 4096 Jan 13 09:37 files
-rw-r----- 1 harsh  ubuntu 0 Jan 13 10:18 secure.txt
ubuntu@ip-172-31-16-28:~/linux_practice/day1$
```

4. Explain:

- Why 777 is dangerous

This is dangerous because everyone including owner , group owner and others have same access rights to all 3 permissions (read, write, execute) . This makes the system vulnerable because anyone can make the changes even if he is not authorised to do that.

- Difference between permission and ownership

Permission basically means a defined set of actions that can be performed by the user on a file . the actions includes read, write and execute .

Ownership means that who has the control to a particular file and to whom it belongs .