Assignment -2

Permissions & Ownership

1. Create a file named secure.txt

2. Set permissions so that:

○ Owner → read/write

○ Group → read only

○ Others → no access

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ touch secure.txt
ubuntu@ip-172-31-25-177:~/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 09:51 files
-rw-rw-r-- 1 ubuntu ubuntu    0 Jan 13 10:18 secure.txt
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ sudo chmod 640 secure
chmod: cannot access 'secure': No such file or directory
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ sudo chmod 640 secure.txt
ubuntu@ip-172-31-25-177:~/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 09:51 files
-rw-r----- 1 ubuntu ubuntu    0 Jan 13 10:18 secure.txt
```

3. Change ownership of the file to another user

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ sudo useradd -m meghna
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ cd ~
ubuntu@ip-172-31-25-177:~$ ls
linux_lab_day1  linux_practice
ubuntu@ip-172-31-25-177:~$ cd ~
ubuntu@ip-172-31-25-177:~$ cd ..
ubuntu@ip-172-31-25-177:/home$ ls
meghna  ubuntu
```

```
ubuntu@ip-172-31-25-177:~/linux_practice/day1$ sudo chown meghna secure.txt
ubuntu@ip-172-31-25-177:~/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 09:51 files
-rw-r----- 1 meghna ubuntu    0 Jan 13 10:18 secure.txt
```

4. Explain:

○ **Why 777 is dangerous**

777 means that all users (owner, group owner and others) get access to all 3 permissions (read,write and execute). This makes the system vulnerable to unnecessary modifications as anyone can modify the content. Any harmful files can be created, important files may be deleted or misuses.

○ **Difference between permission and ownership**

Permission – A defined set of activities that a user is allowed to perform on a file/folder etc/.

For example- a user with rw permission can only read and write in the file and cannot execute anything.

Ownership – Specifies to whom a file belongs to (owner, group owner or others), the user who has control over a file.