LAB ASSIGNMENT 2

Ques 1. Create one file with respect to your roll no, and add executive permission to owner, withdraw write, execute permission to group, and assign read and execute permission to others.

Solution (Absolute Mode)

```
nikhil@ubuntu:~/lab2$ touch 20051523.txt
nikhil@ubuntu:~/lab2$ ls -l 20051523.txt

-rw-rw-r-- 1 nikhil nikhil 0 Jan 24 04:36 20051523.txt

nikhil@ubuntu:~/lab2$ chmod u+x 20051523.txt

nikhil@ubuntu:~/lab2$ ls -l 20051523.txt

-rwxrw-r-- 1 nikhil nikhil 0 Jan 24 04:36 20051523.txt

nikhil@ubuntu:~/lab2$ chmod g-x 20051523.txt

nikhil@ubuntu:~/lab2$ chmod g-w 20051523.txt

nikhil@ubuntu:~/lab2$ chmod o+rx 20051523.txt

nikhil@ubuntu:~/lab2$ ls -l 20051523.txt

-rwxr--r-x 1 nikhil nikhil 0 Jan 24 04:36 20051523.txt
```

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Roll No.: 20051523

Solution (Symbolic Mode)

```
nikhil@ubuntu:~/lab2$ chmod 745 20051523.txt
nikhil@ubuntu:~/lab2$ ls -l 20051523.txt
-rwxr--r-x 1 nikhil nikhil 0 Jan 24 04:36 20051523.txt
```

Ques 2. Create a file (CSE_RollNo.), in that file assign write and execute permission to owner, add the write permission to group, withdraw the read and execute permission from the others.

Solution (Absolute Mode)

```
nikhil@ubuntu:~/lab2$ touch CSE_20051523.txt
nikhil@ubuntu:~/lab2$ chmod u-r CSE_20051523.txt
nikhil@ubuntu:~/lab2$ chmod u+wx CSE_20051523.txt
nikhil@ubuntu:~/lab2$ chmod g+w CSE_20051523.txt
nikhil@ubuntu:~/lab2$ chmod o-rx CSE_20051523.txt
--wxrw---- 1 nikhil nikhil 0 Jan 24 05:13
CSE_20051523.txt
```

Solution (Symbolic Mode)

```
nikhil@ubuntu:~/lab2$ chmod 360 CSE_20051523.txt
nikhil@ubuntu:~/lab2$ ls -l CSE_20051523.txt
--wxrw---- 1 nikhil nikhil 0 Jan 24 05:13 CSE_20051523.txt
```

Ques 3. Create a file with some content and link that file (hard and soft) to another file.

- Update the file and show that the updated content will be available in the first file.
- If you delete the file one, is there any effect on another file.

Solution (Hardlink & Softlink)

```
nikhil@ubuntu:~/lab2$ touch hard_link.txt
nikhil@ubuntu:~/lab2$ ln hard_link.txt link_file.txt
nikhil@ubuntu:~/lab2$ gedit hard_link.txt
nikhil@ubuntu:~/lab2$ touch soft_link.txt
nikhil@ubuntu:~/lab2$ ln -s soft_link.txt link_soft.txt
nikhil@ubuntu:~/lab2$ rm soft_link.txt
nikhil@ubuntu:~/lab2$ rm hard_link.txt
```

- The file linked using soft link gets deleted as the original file was deleted.
- The file linked using hard link doesn't gets deleted.

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