

✧ Permissions:

Types of Permissions:

- Read (r)
- Write (w)
- Execute (x)

❖ Chmod:

The chmod command is used to modify the permissions of a file or directory.

1.Alphabetical method:

- u = owner (user)
- g = group
- o = others

2.Numerical method:

- r = 4 (read permission)
- w = 2 (write permission)
- x = 1 (execute permission)

Permissions are set by adding the appropriate values for each user category (u, g, o) and the desired permissions.

➤ **Example:**

To give read and write permissions to the owner and read permission to the group and others:

```
chmod 644 filename
```

❖ **Chown:**

The chown command is used to change the ownership of a file or directory.

```
chown owner[:group] filename
```

- owner = new owner of the file
- group = (optional) new group for the file

➤ **Example:**

```
chown john:admin filename
```

This command changes the owner to john and the group to admin.

❖ **Chgrp:**

The chgrp command is used to change the group ownership of a file or directory.

```
chgrp group filename
```

group = new group for the file

➤ **Example:**

```
chgrp admin filename
```

This command changes the group ownership to admin.

✧ **umask:**

The umask command sets the default permissions for newly created files and directories. It determines which permissions are **not** granted by default.

A umask value is subtracted from the default permission (usually 777 for directories and 666 for files).

➤ **Example:**

If the umask is set to 022, the default permissions for files will be 644 and for directories 755.

#To view the current umask value:

```
umask
```

#To set a new umask value:

```
umask 022
```

Thank You !