Linux File Permissions — Shraju Adhikari

1. Understanding Permissions:

Linux uses rwx (read, write, execute) for Owner, Group, Others.

Example:

-rwxr-x---

2. Viewing Permissions:

Command:

ls -l

3. Changing Permissions:

chmod 755 file

chmod u+x script.sh

chmod g-w data.txt

chmod o-r secrets.txt

4. Changing Ownership:

sudo chown user file

sudo chown user:group file

5. Creating Users/Groups:

sudo adduser testuser

sudo groupadd developers

sudo usermod -aG developers testuser

6. Securing Directories:

chmod 700 private_folder

7. Best Practices:

- Remove write permissions from group/others

- Use secure defaults (chmod 600 or 700)

- Restrict script execution

- Maintain proper user/group assignments