

# LINUX

## ★ Basic Navigation

⇒ ls ⇒ list files

cd dir ⇒ enter directory

cd .. go to last directory

cd ../.. go to last second dir

cd ../.. and so on

pwd ⇒ present working directory

~ ⇒ home directory (expres to (home/path))

mkdir Folder ⇒ make directory

mkdir -p -/-/ ⇒ make directory

rm file / rm -r folder delete

touch file.txt create create that file.

mv alpha.txt ~/Sys Jobs/Archive/

( ) move a file from one directory to other

cp beta.txt ~/Sys Ops Job/ ⇒ copy a file

mv gamma.txt delta.txt ⇒ rename a file



⇒ Hard Link.

Points directly to the file inside  
even if original file is deleted → hardlink still works  
Same file content, same inode number.

⇒ command ⇒ `ln -s ../enquiries/session A/beta.txt`  
beta-handled

⇒ Soft Link.

Shortcut points to original file path  
Breaks if original file is deleted  
Different inode number.

command ⇒ `ln -s ../`

we can mix the hard & soft link by.

`ls -li` ⇒ This gives everything present and related to the files in the directory



`sudo`  $\Rightarrow$  Super User do

$\hookrightarrow$  it is a root user

(or Normal user has limited permissions)

$\Rightarrow$  File/Folder permission

like can have 3 types of permission  
r, w, x

User

Group

Other

$\Rightarrow$  Read, Write, Execute

(Meaning of these permissions for a file and folder are diff)

for a file in default

dir

lc-lf

permission for group

$\Rightarrow$

permission for other

permission for owner

if it is d that means it is a folder

value  $\Rightarrow$

r=4

w=2

x=1

any other

We can change the permission by `chmod 700` File Name

r w x

1 1 0

$\Rightarrow$  6

1 0 1

$\Rightarrow$  5

1 1 1

$\Rightarrow$  7

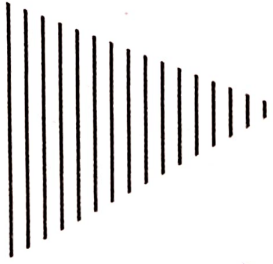
$\Rightarrow$  usual modes

ACL Concept

$\hookrightarrow$  Used to assign specific permission to specific users or groups, without touching the owner.

`sudo setfacl -m u=analyzhi:r,printer-log:trt`  
(to whom) (which permission)





=> System Information Commands

`pwd` => present working directory

`users` => current logged-in user  
`/who`

`uptime` => system uptime

`free -h` => Memory usage summary.

`df -h` => CPU and disk utilization

`uname -r` => Kernel Version

`echo` => just print

=> User & Group Management.

• Create new user.

`sudo adduser analyst1`

Create new group

`sudo addgroup data team`

Adding user to group

`sudo usermod -g data team analyst`  
add ← to user

creating showed dir  
sudo mkdir /data hub  
L, in root

group ownership

sudo chown : data /data hub

sudo chmod ~~770~~ 770 /data hub

L, owner, group full access