

## **TOPIC : LINUX**

**NAME : MULAGADA DILEEP KUMAR**

### **1. file and directory management**

#### **1.1 listing files and directories**

ls - list files and directories

ls -l

ls -a - show hidden files

ls -a

#### **1.2 changing directories**

cd - change directory

cd /home/user/documents

#### **1.3 creating and deleting files**

touch - create a new empty file

touch file.txt

rm - remove a file

rm file.txt

#### **1.4 creating and deleting directories**

mkdir - create a directory

mkdir new\_folder

rmdir - remove an empty directory

rmdir new\_folder

rm -r - remove a directory and its contents

rm -r new\_folder

### **2. file permissions**

chmod - change file permissions

chmod 755 script.sh

chown - change file ownership

chown user:group file.txt

### **3. file content commands**

cat - view file content

cat file.txt

less - view large files page by page

less file.txt

head - view first 10 lines

head file.txt

tail - view last 10 lines

tail file.txt

### **4. process management**

ps - display running processes

ps aux

top - display real-time system usage

top

kill - terminate a process

kill <pid>

### **5. networking commands**

ping - check network connectivity

ping google.com

ifconfig - display network interfaces

ifconfig

netstat - display network connections

netstat -tulnp

### **6. user management**

whoami - show current user

whoami

id - display user id

id

useradd - add a new user

sudo useradd newuser

passwd - change user password

passwd newuser

## **7. disk management**

df - show disk usage

df -h

du - show file and directory size

du -sh \*

mount - mount a filesystem

mount /dev/sdb1 /mnt

umount - unmount a filesystem

umount /mnt

## **8. system information**

uname -a - show system information

uname -a

uptime - show system uptime

uptime

hostname - show system hostname

hostname

free -m - display memory usage

free -m

## **9. package management**

### **debian-based (ubuntu, debian)**

sudo apt update

sudo apt install package\_name

### **redhat-based (rhel, centos)**

sudo yum update

`sudo yum install package_name`

## **10. search commands**

`find` - locate files

`find /home -name "file.txt"`

`grep` - search inside files

`grep "keyword" file.txt`

`locate` - find files faster

`locate file.txt`

## **11. compression commands**

`tar` - create an archive

`tar -cvf archive.tar file.txt`

`gzip` - compress a file

`gzip file.txt`

`unzip` - extract zip files

`unzip file.zip`

## **12. miscellaneous commands**

`history` - show command history

`history`

`alias` - create a shortcut for commands

`alias ll='ls -la'`

`echo` - print output to terminal

`echo "hello, world!"`