

## Linux & Terminal Command Cheat Sheet

### 1. File & Directory Navigation

```
pwd
ls
ls -l
ls -a
cd folder
cd ..
cd ../..
cd /path/to/dir
cd ~
cd -
```

### 2. File & Directory Management

```
touch file.txt
mkdir folder
mkdir -p a/b/c
rm file
rm -r folder
rm -rf folder
cp f1 f2
cp -r dir1 dir2
mv old new
cat file.txt
head file.txt
tail file.txt
tail -f file.txt
```

### 3. Editing Files

```
nano file.txt
vim file.txt
code .
```

### 4. Permissions & Ownership

```
chmod 755 file
chmod +x script.sh
chown user:group file
sudo command
```

### 5. Search & Find

```
find . -name "*.txt"
grep "text" file
grep -r "text" folder
grep -i "text" file
```

### 6. Processes & System Monitoring

```
top
htop
ps aux
kill PID
kill -9 PID
df -h
du -sh folder
free -h
```

### 7. Networking

```
ping google.com
curl url
wget url
ifconfig / ip a
ssh user@host
scp file user@host:dest
```

### 8. Package Management (Ubuntu/WSL)

sudo apt update  
sudo apt upgrade  
sudo apt install pkg  
sudo apt remove pkg

#### 9. Git Commands

git init  
git clone URL  
git status  
git add .  
git commit -m "msg"  
git push origin main  
git pull  
git branch  
git checkout -b new

#### 10. Python Environment Commands

python3 file.py  
pip install package  
pip list  
virtualenv venv  
source venv/bin/activate  
deactivate

#### 11. Compression & Archiving

tar -cvf file.tar folder  
tar -xvf file.tar  
zip -r file.zip folder  
unzip file.zip

#### 12. Shell Scripting Basics

#!/bin/bash  
echo "text"  
bash script.sh  
chmod +x script.sh

#### 13. Docker CLI Essentials

docker pull image  
docker build -t name .  
docker run name  
docker ps  
docker stop ID

#### 14. System Information

uname -a  
hostname  
whoami

#### 15. WSL Commands

wsl -l -v  
wsl --shutdown  
explorer.exe .