

# MobaXterm Linux + ROS Commands Cheat Sheet

## Navigation Commands

Command	Description
pwd	Show current directory
ls	List files/folders
cd <folder>	Change directory
cd ..	Go up one directory
cd ~	Go to home directory

## File Operations

Command	Description
cp source dest	Copy file/folder
mv source dest	Move or rename file/folder
rm file	Delete file
rm -r folder	Delete folder recursively
mkdir folder	Create folder

## Viewing Files

Command	Description
cat file	Show file contents
less file	Scroll through file
head file	Show first 10 lines
tail file	Show last 10 lines (tail -f for live view)

## System Info

Command	Description
whoami	Show logged-in user
hostname	Show server name
df -h	Show disk usage
top	Show running processes (q to quit)
htop	Better version of top (if installed)

## Editing Files

Command	Description
nano file.txt	Simple text editor (Ctrl+X to exit)
vi file.txt	Powerful editor (i=insert, :wq=save & quit)

## Package Management

Command	Description
sudo apt update	Update package list
sudo apt install <pkg>	Install package
sudo apt upgrade	Upgrade packages

## Execution & Compilation

Command	Description
gcc file.c -o output && ./output	Compile & run C program
python3 script.py	Run Python script
roslaunch package file.launch	Launch ROS simulation

## Session Management

Command	Description
exit	Close session
clear	Clear terminal screen

## ROS (Robot Operating System) Commands

Command	Description
roscore	Start ROS master
roscnode list	List active nodes
roscnode info <node>	Node details
rostopic list	List active topics
rostopic echo <topic>	Display topic messages
rostopic pub <topic> <msg_type> <data>	Publish data to topic
rosservice list	List available services
roslaunch package file.launch	Launch ROS application

roslaunch package node	Run a specific ROS node
rviz	Start RViz visualization tool
gazebo	Start Gazebo simulation environment
catkin_make	Build ROS workspace
source devel/setup.bash	Source ROS environment after build