

## Lesson 8 Raspberry Pi Linux Command

Remembering mountains of Linux commands is changeable for Linux novice. This chapter will explain the commands in common use, which helps you to reach it easily.

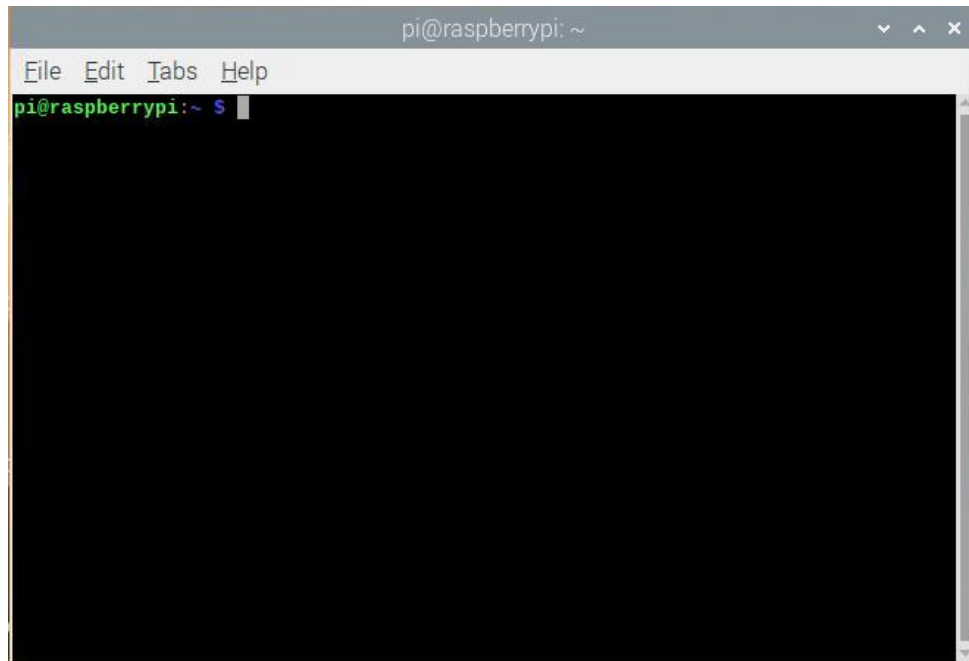
Table 1 Linux common-used command

Command	Full name	Function
ls	List	List the files in the current directory
cd	Change Directory	Change path
pwd	Print Working Directory	Display the current directory
ping	Packet Internet Groper	Test the internet connection
shutdown	Shut down	Shut down
reboot	Reboot	Reboot
cp	Copy	Copy
rm	Remove	delete
mkdir	Make directory	Create a folder
man command	Manual	Display the command info
echo	Echo	Echo the input info to the terminal interface
sudo	Superuser do	Execute commands as system administrator
clear	Clear	Delete the text on terminal
find	Find	Search
mv	Move	Rename or cut
date	Date	Read the date/time of the system

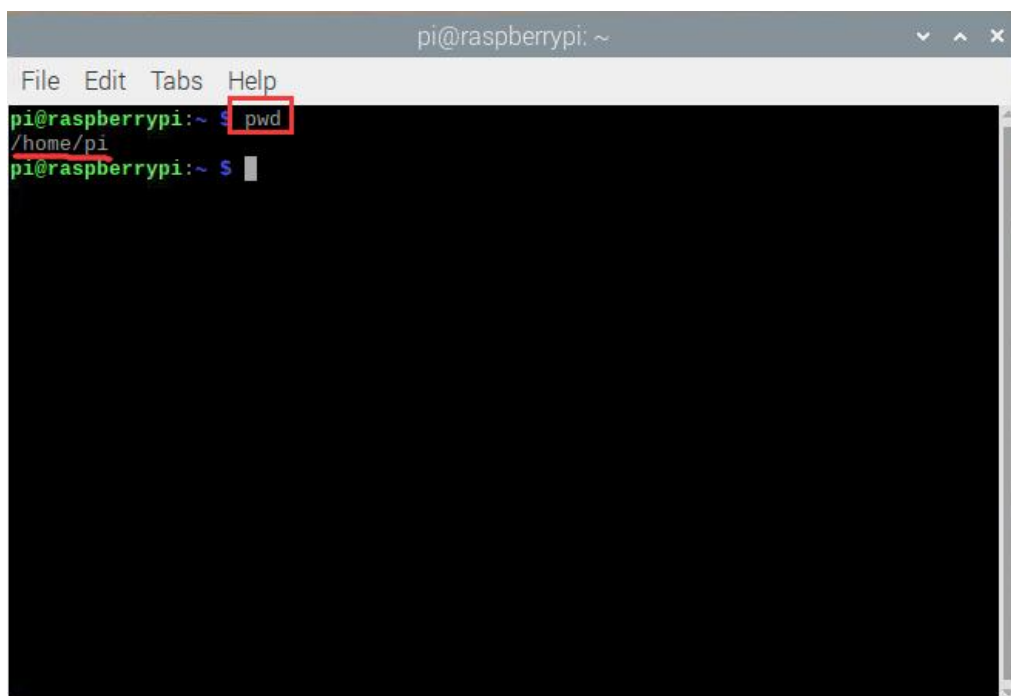
In Linux, it is strictly case-sensitive, including uppercase and lowercase commands.

Example of command operation:

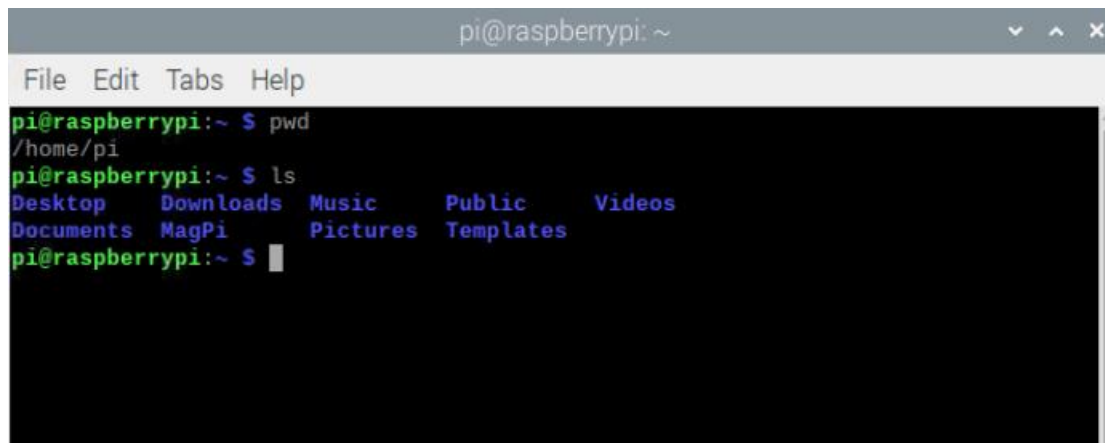
- 1) Start VNC and open LX terminal.



2) Enter the first command “pwd” which is used for displaying the current directory. It is currently in the /pi folder under the /home directory.



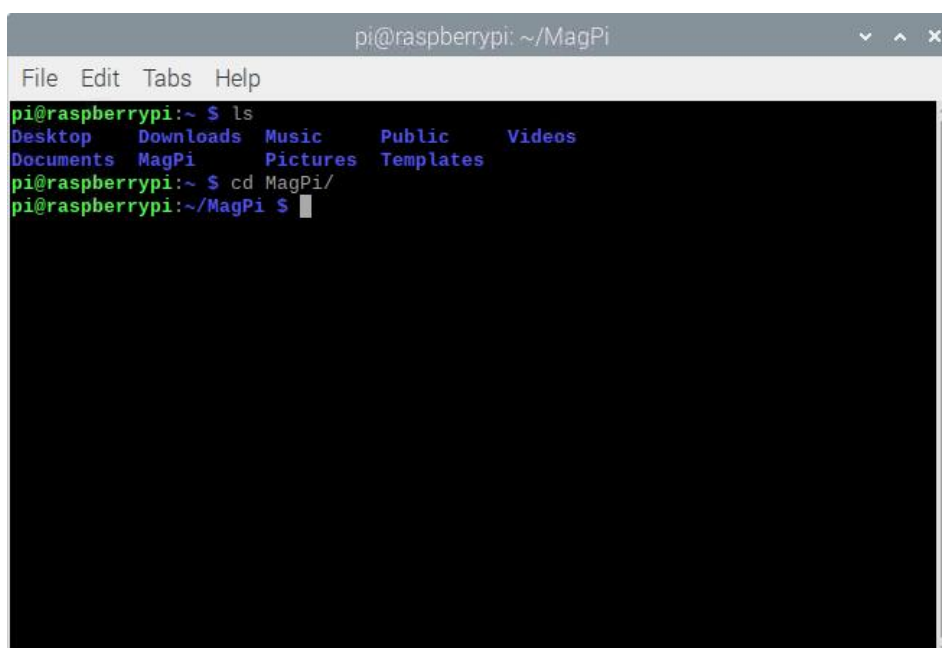
3) Enter command “ls” to list the folder info in the current directory. You can use commands such as "ls -l" and "ls -a" to obtain file permissions, modification dates and other information.

A terminal window titled 'pi@raspberrypi: ~' with a menu bar (File, Edit, Tabs, Help). The terminal shows the following commands and output:

```
pi@raspberrypi:~ $ pwd
/home/pi
pi@raspberrypi:~ $ ls
Desktop  Downloads  Music      Public     Videos
Documents MagPi      Pictures   Templates
```

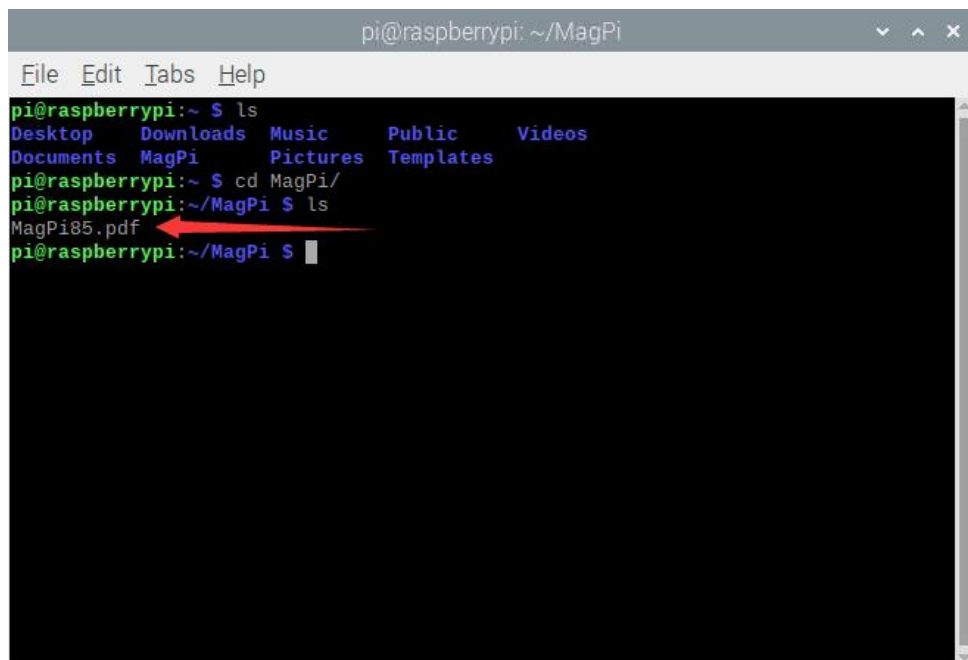
4) Enter "cd" command to jump into "MagPi" directory.

Tips: In Linux systems, you can use the "Tab" key to assist command input. The "Tab" key can automatically complete commands or file (directory) names or file (directory) paths. For example, when we want to go to the "MagPi" directory, enter the command "cd Ma", and then press the "Tab" key on the keyboard. The command will be automatically completed as "cd MagPi". If there are no overlapping characters when you press the "Tab" key, the complete file name will appear on the command line. If there are overlapping name characters, all file named with these characters will appear as below.

A terminal window titled 'pi@raspberrypi: ~/MagPi' with a menu bar (File, Edit, Tabs, Help). The terminal shows the following commands and output:

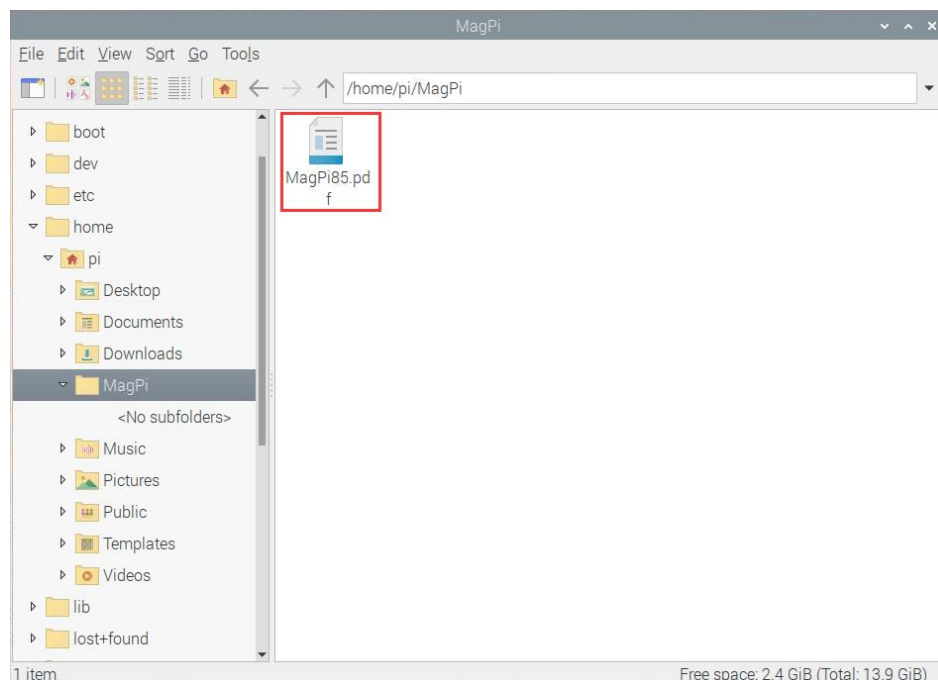
```
pi@raspberrypi:~ $ ls
Desktop  Downloads  Music      Public     Videos
Documents MagPi      Pictures   Templates
pi@raspberrypi:~ $ cd MagPi/
pi@raspberrypi:~/MagPi $
```

5) This is the directory where the games located in. You can enter "ls" command again to check the files in this directory.



```
pi@raspberrypi: ~/MagPi
File Edit Tabs Help
pi@raspberrypi:~ $ ls
Desktop Downloads Music Public Videos
Documents MagPi Pictures Templates
pi@raspberrypi:~ $ cd MagPi/
pi@raspberrypi:~/MagPi $ ls
MagPi85.pdf
pi@raspberrypi:~/MagPi $
```

6) The file circled by the red arrow in the file shown above. Click on the "File" in the upper left corner, find and enter the "MagPi" directory to verify that the file list obtained by the "ls" command is same as the actual situation or not.



7) Enter "man" command to display the command info.

```

pi@raspberrypi: ~
File Edit Tabs Help
pi@raspberrypi:~ $ man
What manual page do you want?
pi@raspberrypi:~ $

```

8) For example, if you want to check the meaning of the "cp" command, you can enter the "man cp" and press "Enter". The content marked in the red box in the picture is the meaning of the "cp" command which is copy files and folders.

```

pi@raspberrypi: ~
File Edit Tabs Help
CP(1) User Commands CP(1)
NAME
cp - copy files and directories
SYNOPSIS
cp [OPTION]... [-I] SOURCE DEST
cp [OPTION]... SOURCE... DIRECTORY
cp [OPTION]... -t DIRECTORY SOURCE...
DESCRIPTION
Copy SOURCE to DEST, or multiple SOURCE(s) to DIRECTORY.

Mandatory arguments to long options are mandatory for short options
too.

-a, --archive
    same as -dR --preserve=all

--attributes-only
    don't copy the file data, just the attributes

--backup[=CONTROL]
Manual page cp(1) line 1 (press h for help or q to quit)

```

9) The content of "DESCRIPTION" is the detailed instruction of the "cp" command.

```

pi@raspberrypi: ~
文件(F) 编辑(E) 标签(T) 帮助(H)
DESCRIPTION
Copy SOURCE to DEST, or multiple SOURCE(s) to DIRECTORY.

Mandatory arguments to long options are mandatory for short options
too.

-a, --archive
    same as -dR --preserve=all

--attributes-only
    don't copy the file data, just the attributes

--backup[=CONTROL]
    make a backup of each existing destination file

-b
    like --backup but does not accept an argument

--copy-contents
    copy contents of special files when recursive

-d
    same as --no-dereference --preserve=links

Manual page cp(1) line 10 (press h for help or q to quit)

```

Tip: you can use shortcut keys to turn pages. The following table shows the shortcut keys.

Table 2 Shortcut key instruction

Function	Shortcut
Next page	SPACE
Last page	B
Next line	ENTER
Last line	K
Back to terminal	:Q

In addition to the above commands and buttons, there are some special control buttons in the Linux system.

Table 3 Key Instruction

Key	Function
↑	Command history
Tab	Complete command
Ctrl+C	Stop the running programming
Ctrl+D	Exit terminal interface
Ctrl+A	Switch the pointer to the beginning of the line
Ctrl+X	Switch the pointer to the end of the line