

Raspberry Pi and Linux Cheatsheet

Navigating the File System	
pwd	Shows the directory you are in
cd	Changes to a directory
ls	Lists file and directory names and attributes
clear	Clear a command line screen/window for a fresh start.
Manipulating Files and Directories	
cp	Copies files
mv	Renames and moves files and directories
rm	Removes files
mkdir	Creates a new directory
chmod	Changes the access permissions of a file or directory
chown	Change who owns a file.
touch	Creates a new, empty file in the current directory; or, if file already exists, changes its last-accessed time-stamp to now
Display and Modify the Contents of a File	
cat	Displays files (and is used with other tools to concatenate files)
head	Displays the first part of a file (first 10 lines by default)
less	Displays files allowing for scrolling forward and backward (pauses when screen is full)
tail	Displays the last lines of files (last 10 lines by default)
System Information and Settings	
df	Displays the amount of free space remaining on disk
du	Summarizes file space usage
ifconfig	Sets up a network interface (deprecated)
ip	show / manipulate routing, network devices, interfaces and tunnels
iwconfig	Get info on wireless networks (deprecated)
iw	Get info on wireless networks
alias	Establishes an alias
passwd	Changes a password
top	Dynamically displays the status of processes in real time, focusing on those processes that are using the most CPU resources
date	Sets and displays date and time
reboot	reboot immediately
poweroff	shutdown immediately
shutdown now	shutdown immediately

Networking	
ssh	Remotely log in to another Linux machine over the network. Leave an ssh session by typing exit.
ping	Polls another network station (using TCP/IP), great for a fast determination about whether your network connection is working
Misc	
man	Displays documentation for commands
cal	Displays a calendar for a month or year
apt	install and remove programs
raspi-config	
CLI Keyboard Shortcuts	
ctrl+a:	move the cursor to the **beginning** of the line
ctrl+e:	move the cursor to the **end** of the line
ctrl+l:	clear the screen. Considered equivalent to `clear`.
ctrl+d:	log out of current session (ssh, etc). Considered equivalent to `exit`.
ctrl+z:	send running program to background. Normally would use `&` when initially entering the command to run, but if you forget, use this.
ctrl+c:	end currently running program.
ctrl+u:	erases everything from the current cursor position to the **beginning** of the line
ctrl+k:	erases everything from the current cursor position to the **end** of the line
ctrl+y:	pastes text erased using ctrl+u, ctrl+k, or ctrl+w.
ctrl+r:	opens dialog for searching past command history
UP arrow:	Pressing the UP key will enter the last command entered into the command prompt. This is a quick way to correct commands that were made in error.

3v3 Power	1	2	5v Power
GPIO 2 (i2c1 SDA)	3	4	5v Power
GPIO 3 (i2c1 SCL)	5	6	Ground
GPIO 4 (GPCLK0)	7	8	GPIO 14 (UART TX)
Ground	9	16	GPIO 15 (UART RX)
GPIO 17	11	12	GPIO 18 (PCM CLK)
GPIO 27	13	14	Ground
GPIO 22	15	16	GPIO 23
3v3 Power	17	18	GPIO 24
GPIO 10 (SPI0 MOSI)	19	20	Ground
GPIO 9 (SPI0 MISO)	21	22	GPIO 25
GPIO 11 (SPI0 SCLK)	23	24	GPIO 8 (SPI0 CE0)
Ground	25	26	GPIO 7 (SPI0 CE1)
GPIO 0 (EEPROM SDA)	27	28	GPIO 1 (EEPROM SCL)
GPIO 5	29	30	Ground
GPIO 6	31	32	GPIO 12 (PWM0)
GPIO 13 (PWM1)	33	34	Ground
GPIO 19 (PCM FS)	35	36	GPIO 16
GPIO 26	37	38	GPIO 20 (PCM DIN)
Ground	39	40	GPIO 21 (PCM DOUT)

