Process Management	
PS	Show process information
Show running processes	ps -ef
Show running processes hide threads	pstree -Tp
Show detailed information about a process	pgrep -a process_name
KILL	Sends a signal to a process usually to stopping a process
Terminate a program using SIGTERM	kill pid
List available signal names	kill -l
Terminate a program using SIGHUP	kill -1 pid
Terminate a porgram using SIGINT	kill -2 pid
Signal the operating system to immediately terminate a program	kill -9 pid
Pause a program until it resumes with the SIGCONT signal	kill -17 pid
Cancel a running process	Ctrl + c
Pause a running process	Ctrl + z
Move process to background	bg %job_id
Move process to foreground	fg %job_id
Remove job from the shell	command & disown
Show status of all jobs	jobs
Show status of a particular job	jobs job_id
Show status and process id's of all jobs	jobs -l
Show process id's of all jobs	jobs -p

Permission	
CHOWN	Change user and group ownership of files and folders
Change the owner user of a file or folder	chown username path/to/file
Change the owner user and group of a file or folder	chown user:group path/to/file
Recursively change the owner of a folder and its contents	chown -R user path/to/folder
Change the owner of a symbolic link	chown -h user path/to/symlink
Change the owner of a file or folder to match a reference file	chown --reference=path/to/r-eference_filepath/to/file
CHGRP	Change group ownership of files and folders.
Change the owner of a file or folder	chgrp group path/to/file
Recursively change the owner of a folder and its contents	chgrp -R group path/to/folder
Change the owner of a symbolic link	chgrp -h user path/to/symlink
Change the owner of a file/folder to match a reference file	chgrp --reference=path/to/refe-rence_file path/to/file
CHMOD	Change the access permis-sions of a file or directory
Give the user who owns a file the right to e[x]ecute it	chmod u+x file
Remove executable rights from the group	chmod g-x file
Give the user rights to read and write to a file or directory	chmod u+rw file

Permission (cont)

Give all users rights to read and execute	chmod a+rx file
Give others (not in the file owner's group) the same rights as the group	chmod o=g file
User, Group, Other	'u' | 'g' | 'o'
Read, Write, Execute	'r' | 'w' | 'x'
'+' | '-' | '='	Add, Revoke, Set
Octal	0 = None, 1 = execute only, 2 = write only, 3 = write and execute, 4 = read only, 5 = read and execute, 6 = read and write, 7 = read, write and execute (full permission)

Archive

TAR	Create, Compress, Extract files
Create new archive from files	tar -cf name file1 file2 file3
Append files to an existing archive	tar -rf archive_name files/to/add
List archived files	tar -tvf archive_name
Extract all files	tar -xf archive_name
Extract an archive to specified directory	tar -xf archive_name -C path/to/dir
Create a gzipped archive	tar -czf name file1 file2 file3
Create a bzipped archive	tar -cjf archive_name
Extract gzipped archive	tar -xzf archive_name
Extract bzipped archive	tar -xjf archive_name
Create a compressed archive, using archive suffix to determine the compression	tar -caf archive_name.tar.xz, archive_name.gz, archive_name.bz file1 file2 file3

Storage Media

Show all mounted filesystems	mount
Mount a device to a directory	mount path/to/dev path/to/dir
Mount all the filesystems defined in /etc/fstab	mount -a
Unmount a filesystem	umount path/to/device
Fsck (Dry Run)	fsck -N /path/to/dev
Check for filesystem errors	fsck path/to/dev
Fix detected errors	fsck -y /path/to/dev
Show partitions	fdisk -l
Run fdsik	fdisk /dev/target/device
Create filesystem	mkfs.ext2 /path/to/dev [ext3, ext4, btrfs, ntfs]
Create filesystem with a volume-label	mkfs.ntfs -L name /path/to/dev
Create filesystem with specific UUID	mkfs.ntfs -U UUID /path/to/dev
Mkfs (Dry Run)	mkfs.ext4 -vv
Create a bootable usb media from a iso image	dd bs=8M if=/path/to/iso of=/dev/usb_drive conv=fsync oflag=direct status=progress

Secure Shell Host (SSH)

SSH	Secure Shell is a protocol used to securely log onto remote systems. It can be used for logging or executing commands on a remote server.
Connect to a remote server	ssh username@remote_host
Connect to a remote server with a specific identity (private key)	ssh -i path/to/key_file username@remote_host
Connect to a remote server using a speciific port	ssh -p 23 username@remote_host
Execute a command on a remote server	ssh remote_host "example_command"

Secure Shell Host (SSH) (cont)

Compress all data if the connection is slow	ssh -C username@remote-_host
Print debug information	ssh -v username@remote-_host
Enable X11 forwarding	ssh -X username@remote-_host
Generate SSH keys	ssh-keygen
Copy puplic SSH key to a server	ssh-copy-id ip_adress
SCP	Secure copy files over ssh
Copy a local file to a remote host	scp path/to/file username@-remote_host:path/to/save
Copy a file from a remote host to your local directory	scp username@remote_ho-st:path/to/remote_file path/l-ocal/dir
Recursively copy the contents of a directory on a remote host to a local directory	scp -r path/to/local_dir remote_host:path/to/save
Use a specific ssh private key for authentication with the remote host	scp -i ~/.ssh/private_key local_file remote_host:path/t-o/save
Use a speciific port	scp -P 23 path/to/file username@remote_host:-path/to/save
Copying multiple files to a remote host	scp file1 file2 username@-remote_host:path/to/save
Copying multiple file from remote host	scp username@localh-ost:path/to/{file1, file2}

Kernel module handling

Show active kernel modules	lsmod
Show information about a specific kernel module	modinfo modulename
Insert a module into the Linux Kernel	insmod modulename
Remove a module from the Linux Kernel	rmmod modulename

Kernel module handling (cont)

Generate a list of dependency description of kernel modules	depmod
MODPROBE	Add and remove modules form the Linux Kernel
Insert kernel modules	modprobe -a modulename1 modulename2
Remove kernel module	modprobe -r modulename1 modulename2
Prints current configuration	modprobe -c
Modprobe (Dry Run)	modprobe --show
Print messages about what the program is doing	modprobe -v

File Searching

FIND	It can be used to find files and directories and perform subsequent operations on them
Search by name case sensitive	find /dir -name "search_term"
Search by name case insensitive	finde /dir -iname "search_term"
Search by file type d=dir, f=file	find /dir -type f
Search by wildcard	find /dir "*search_term", "search_term*"
Search and execute a command	find /dir -exec command {} \;
PLOCATE	find files by name
Search for files	plocate search_term

Tmux

TMUX	Terminal Multiplexer (prefix ctrl + a)
Enter copy mode	prefix + pageup
Choose a session from a list	prefix + s

Tmux (cont)	
Choose a window from a list	prefix -w
Show a clock	prefix -t
Zoom active pane rather maximize	prefix - z
Resize the pane up by 5	prefix + alt + up (arrow keys)
Resize the pane down by 5	prefix + alt + down (arrow keys)
Resize the pane left by 5	prefix + alt + left (arrow keys)
Resize the pane right by 5	prefix + alt + right (arrow keys)
Break the pane out and maximize to fullscreen	prefix + shift + !
Create a new window	prefix + c
Switch the attached client to the next session	prefix + shift +)
Switch the attached client to the previous session	prefix + shift + (
Select window	prefix + 0 to 9

Kitty	
KITTY	Terminal emulator (prefix ctrl + shift)
New window	prefix + enter
Select window	prefix + 1
Open new tab	prefix + t
Close tab	prefix + t
Next tab	prefix + right (arrow key)
Previous tab	prefix + left (arrow key)
Set tab title	prefix + alt + t
Rezise window or pane	prefix + r
Edit kitty config file	prefix + F2

User account administration	
Create a user account	useradd username
Modify a user account	usermod username
Delete a user account	deluser username
Change user password	passwd username

Miscellaneous	
ALIAS	Creates aliases words that are replaced by a command string
Create a generic alias	word="command"
Remove an aliased command	unalias word
List all aliased words	alias -p
View the command associated to a given alias	alias word
CAL	Prints calendar information
Display calendar for the current month	cal
Display calendar for a specific month	cal month_number
Display a 12 month calendar for the current year	cal -y
ECHO	Display a line of text
Print a text message	echo example_text
Redirect input to a file	echo example_text >> filename
Verify ISO files with sha1sum	echo "hash" isoname | sha1sum -c
FILE	Determine file type and give a description of the type of the specified file
Determine file type	file path/to/file
Determine the mime encoding type of a file	file -i path/to/file
Try to look inside compressed files	file -z path/to/file

Miscellaneous (cont)	
Try to look inside compressed files but report information about the contens	file -Z path/t-o/file
MAN	Display manual pages
Dsiplay man page for a command	man command