Agenda:

- Package manager [ubuntu, Redhat]
- Files
- searching
- file permission
- user management
- System management

Packages (Debian/Ubuntu)

sudo apt-get install [package_name]	Install an APT package using the apt-get package utility.
sudo apt install [package_name]	Install an APT package using a newer APT package manager.
apt search [keyword]	Search for a package in the APT repositories.
apt list	List packages installed with APT.
apt show [package_name]	Show information about a package.
sudo dpkg -i [package_name.deb]	Install a *.deb* package with the Debian package manager.
sudo dpkg -l	List packages installed with dpkg.

Packages (Red Hat, CentOS, Fedora)

sudo yum install [package_name]	Install a package using the YUM package manager.
yum search [keyword]	Find a package in the YUM repositories based on the provided keyword.
yum list installed	List all packages installed with YUM.
yum info [package_name]	Show package information for a package.
sudo dnf install [package_name]	Install a package using the DNF package manager.
sudo rpm -i [package_name.rpm]	Install a *.rpm* package from a local file.

Files

mkdir [directory_name]	Create a new directory.
rm [file_name]	Remove a file.
rm -r [directory_name]	Remove a directory recursively.
rm -rf [directory_name]	Recursively remove a directory without requiring confirmation.
cp [source_file] [destination_file]	Copy the contents of one file to another file.
cp -r [source_directory] [destination_directory]	Recursively copy a directory to a second directory.
mv [source_file] [destination_file]	Move or rename files or directories.
ln -s [path]/[file_name] [link_name]	Create a symbolic link to a file.
touch [file_name]	Create a new file.
cat [file_name]	Show the contents of a file.
cat [source_file] >> [destination_file]	Append file contents to another file.
head [file_name]	Show the first ten lines of a file.
tail [file_name]	Show the last ten lines of a file.
more [file_name]	Display contents of a file page by page.
less [file_name]	Show the contents of a file with navigation.
nano [file_name]	Open or create a file using the nano text editor.
vi [file_name] vim [file_name]	Open or create a file using the Vi/Vim text editor.
gpg -c [file_name]	Encrypt a file.
gpg [file_name].gpg	Decrypt an encrypted *.gpg* file.
wc -w [file_name]	Show the number of words, lines, and bytes in a file.

ls | xargs wc	List the number of lines/ words/characters in each file in a directory.
cut -d [delimiter] [file_name]	Cut a section of a file and print the result to standard output.
[data] | cut -d [delimiter]	Cut a section of piped data and print the result to standard output.
shred -u [file_name]	Overwrite a file to prevent its recovery, then delete it.
diff [first_file] [second_file]	Compare two files and display differences.
source [file_name]	Read and execute the file content in the current shell.
[command] | tee [file_name] >/dev/null	Store the command output in a file and skip the terminal output.

Searching

find [path] -name [search_pattern]	Find files and directories that match the specified pattern in a specified location.
find [path] -size [+100M]	See files and directories larger than a specified size in a directory.
grep [search_pattern] [file_name]	Search for a specific pattern in a file with grep.
grep -r [search_pattern] [directory_name]	Recursively search for a pattern in a directory.
locate [name]	Locate all files and directories related to a particular name.
which [command]	Search the command path in the $PATH environment variable.
whereis [command]	Find the source, binary, and manual page for a command.
awk '[search_pattern] {print $0}' [file_name]	Print all lines matching a pattern in a file. See also the gawk command, the GNU version of **awk**.
sed 's/[old_text]/ [new text]/' [file name]	Find and replace text in a specified file.

File Permissions

chmod 777 [file_name]	Assign read, write, and execute file permission to everyone (**rwxrwxrwx**).
chmod 755 [file_name]	Give read, write, and execute permission to owner, and read and execute permission to group and others (**rwxr-xr-x**).
chmod 766 [file_name]	Assign full permission to the owner, and read and write permission to the group and others (**rwxrw-rw-**).
chown [user_name] [file_name]	Change the ownership of a file with chown command.
chown [user_name]:[group_name] [file_name]	Change the owner and group ownership of a file.

Users and Groups

id	See details about the active users.
last	Show the last system logins.
who	Display who is currently logged into the system.
w	Show which users are logged in and their activity.
finger [user_name]	Show user information.
sudo useradd [user_name]	Create a new user account.
sudo adduser [user_name]	Create a new user account through the adduser command interface.
sudo userdel [user_name]	Delete a user account.
sudo usermod -aG [group_name] [user_name]	Modify user information (add a user to a group).
passwd sudo passwd [user_name]	Change the current user's or another user's password.
sudo groupadd [group_name]	Add a new group.
sudo groupdel [group_name]	Delete a group.
sudo groupmod -n [new_name] [old_name]	Modify a user group (change group name).
sudo [command]	Temporarily elevate user privileges to superuser or root.
su - [user_name]	Switch the user account or become a superuser.
chgrp [group_name] [file/ directory]	Change file or directory group.

System Management

uname -r	Show system information via uname command.
uname -a	See kernel release information.
uptime	Display how long the system has been running, including the load average.
hostname	View system hostname.
hostname -i	Show the IP address of the system.
last reboot	List system reboot history.
date	See current time and date.
timedatectl	Query and change the system clock.
cal	Show current calendar (month and day).
w	List logged-in users.
whoami	See which user you are using.

finger [user_name]	Show information about a particular user.
ulimit [flags] [limit]	View or limit system resource amounts.
shutdown [hh:mm]	Schedule a system shutdown.
shutdown now	Shut down the system immediately.
modprobe [module_name]	Add a new kernel module.
dmesg	Show bootup messages.