Basic info

pwd	show present working directory
uname	show name of the kernel
uname -r	show kernel version
cd	change directory
clear	clear the screen
whoami	show current login user name
history	show list of previously used commands
date	show time and date
echo *"Hello"*	display *Hello* text
sudo	run commands as super user

Working with directory and files

mkdir *dir*	create single directory *dir*
mkdir *dir1 dir2*	create multiple directories *dir1 dir2*
mkdir -p *dir/a/b/c*	create nested directory *dir/a/b/c*
mkdir *dir{1..10}*	created 10 numbered directories from *dir1* to *dir10*
rm -r *dir*	remove *dir* recursively
touch *file*	create empty file *file*
touch *file1 file2*	create multiple files *file1 file2*
touch *file{1..10}*	create 10 numbered files from *file1* to *file10*
cp -rf */dir/file1 /dir2*	copy file *file1* to *dir2* directory recursively and forcefully
mv */dir/file1 /dir2*	move file *file1* to *dir2* directory
rm *file1*	remove file *file1*

Working with directory and files (cont)

ls -al	show files - both regular & hidden files and their permissions
cat *file1*	display contents of *file1*
find */dir1 -name file1*	find *file1* under */dir1* directory
find */dir1 -perm 664*	find all files/directories with read, write permission to owner and group, read permission for others in directory *dir1*
find */dir1 -empty -exec rm -r {}****	find and remove all empty files/directories from */dir1*
wc -l *file1*	count the number of lines in *file1*
wc -w *file1*	count the number of words in "file1*
head *file1*	display top 10 lines of *file1*
head -n 20 *file1*	display top 20 lines of *file1*
tail *file1*	display last 10 lines of *file1*
tail -n 20 *file1*	display last 20 lines of *file1*

Networking

ifconfig or **ip addr**	show ip address
nmcli con show	show list of connections
nslookup	queries the DNS server for information about a domain name or IP address

Networking (cont)

iptables	sets up, maintains, and inspects the tables of IPv4/IPv6 packet filter rules in the Linux kernel firewall
ping *host*	send packets to *host* to check the connectivity
ping -c *5* *host*	send 5 packets to *host*
curl	facilitates the transfer of data to or from a server, using any of the protocols it supports
netstat	Displays network connections and network statistics, such as active sockets, routing tables, and network interface statistics
ss-keygen	Creates a pair of public and private authentication keys
ssh *user@host*	connect *user* to *host* using ssh
scp *file1* *user1@-host:/dir*	copy *file1* from local to remote host *host* to */dir* location

System and process monitoring

uptime	show current uptime
df	show disk usage
du	show directory space usage
free	show memory and swap usage
ps	show all current active processes
top	task manager program displays information about CPU and memory utilization
kill *pid*	kill process with process id *pid*
bg	list stopped or background jobs
lsof	Lists all files opened by any process of a system
lsof -u *user1*	Lists all files opened by *user1*

File permissions

chmod [symbolic] *file1*	change file permissions of file *file1* based on *[symbolic]* code
chmod u+r *file1*	add read permission to owner for *file1*
chmod g+rw *file1*	add read, write permission to group for *file1*
chmod o-r *file1*	remove read permission to others for *file1*
chmod [octal] *file1*	change file permissions of file *file1* based on *[octal]* code
chmod 777 *file1*	add read, write, execute permission to owner, group, others for *file1*
chmod 754 *file1*	add read, write, execute persmission to owner, read and execute permission to group, read permission to others for *file1*
chown *user1 file1*	change ownership of *file1* to *user1*
chgrp *group1 file1*	change group ownership of *file1* to *group1*
setfacl -m *u:user-1:rwx file1*	add read, write, execute permission to user *user1* for *file1*
setfacl -x *u:user1: file1*	remove all permissions for *user1* for *file1*
setfacl -b *file1*	remove all acl permissions for *file1*

User and Group Management

useradd *user1*	create *user1* user account
passwd *user1*	create password for *user1* user
su	switch user account
exit	logout user
userdel *user1*	delete user account *user1*
usermod -l *user2 user1*	change *user1* login name to *user2*
groupadd *group1*	add group *group1*
groupdel *group1*	delete group *group1*
gpasswd -a *user1 group1*	add single user *user1* to group *group1*
gpasswd -M *user1,user2 group1*	add multiple users *user1 user2* to group *group1*
gpasswd -d *user1 group1*	remove user *user1* from group *group1*
gpasswd -A *user1 group1*	make *user1* as admin of *group1*

Text search and manipulation

grep *text file1*	display the lines that contains *text* in *file1*
grep -ni *text file1*	ignore the case and display line numbers of the matched lines
awk -F',' '{print $1"@"$3}'	print col1@col3
awk -F'\t' '/str/ {print $0}'	print line with str

Compress and archive

tar -cf */dir1/backup.tar /dir2*	create tar archive file */dir1/backup.tar* for */dir2*
tar -xvf */dir1/backup.tar* **-C** */dir2/*	extract tar archive file */dir1/backup.tar* to */dir2/*

cron jobs

at *time*	schedule command to run at *time*
atq	view pending jobs
atrm *2*	remove job *2* from the scheduled commands
crontab -e	set cron jobs
0 2 * * * */dir1/script.sh*	run script */dir1/script.sh* at 2pm daily
crontab -l	show the list the cron jobs of current user

Package management

apt update	update the local package index with the latest changes made in the repositories
apt upgrade	upgrade installed packages
apt install *package*	install *package*
apt remove *package*	remove installed *package*
systemctl start *service*	start *service*
systemctl status *service*	check the status of *service*
systemctl stop *service*	stop *service*
systemctl enable *service*	enable the *service* to start at system startup