

# LINUX COMMANDS CHEAT SHEET

## SYSTEM

uname -a =>Displaylinux system information  
uname -r =>Display kernel release information  
uptime =>Show how long the system has been running + load  
hostname =>Show system host name  
hostname -i =>Display the IP address of the host  
last reboot =>Show system reboot history  
date =>Show the current date and time  
cal =>Show this month calendar  
w =>Display who is online  
whoami =>Who you are logged in as  
finger user =>Display information about user

## HARDWARE

dmesg =>Detected hardware and boot messages  
cat /proc/cpuinfo =>CPU model  
cat /proc/meminfo =>Hardware memory  
cat /proc/interrupts =>Lists the number of interrupts per CPU per I/O device  
lshw =>Displays information on hardware configuration of the system  
lsblk =>Displays block device related information in Linux  
free -m =>Used and free memory (-m for MB)  
lspci -tv =>Show PCI devices  
lsusb -tv =>Show USB devices  
dmidecode =>Show hardware info from the BIOS  
hdparm -i /dev/sda =>Show info about disk sda  
hdparm -tT /dev/sda =>Do a read speed test on disk sda  
badblocks -s /dev/sda =>Test for unreadable blocks on disk sda

## USERS

id =>Show the active user id with login and group  
last =>Show last logins on the system  
who =>Show who is logged on the system  
groupadd admin =>Add group "admin"  
useradd -c "Sam Tomshi" =>g admin -m sam #Create user "sam"  
userdel sam =>Delete user sam  
adduser sam =>Add user "sam"  
usermod =>Modify user information

## FILE COMMANDS

ls -al =>Display all information about files/ directories  
pwd =>Show the path of current directory  
mkdir directory-name =>Create a directory  
rm file-name =>Delete file  
rm -r directory-name =>Delete directory recursively  
rm -f file-name =>Forcefully remove file  
rm -rf directory-name =>Forcefully remove directory recursively  
cp file1 file2 =>Copy file1 to file2  
cp -r dir1 dir2 =>Copy dir1 to dir2, create dir2 if it doesn't exist  
mv file1 file2 =>Rename source to dest / move source to directory  
ln -s /path/to/file-name link-name #Create symbolic link to file-name  
touch file =>Create or update file  
cat > file =>Place standard input into file  
more file =>Output contents of file  
head file =>Output first 10 lines of file  
tail file =>Output last 10 lines of file  
tail -f file =>Output contents of file as it grows starting with the last 10 lines  
gpg -c file =>Encrypt file  
gpg file.gpg =>Decrypt file  
wc =>print the number of bytes, words, and lines in files  
xargs =>Execute command lines from standard input

## PROCESS RELATED

ps =>Display your currently active processes  
ps aux | grep 'telnet' =>Find all process id related to telnet process  
pmap =>Memory map of process  
top =>Display all running processes  
kill pid =>Kill process with mentioned pid id  
killall proc =>Kill all processes named proc  
pkill process-name =>Send signal to a process with its name  
bg =>Resumes suspended jobs without bringing them to foreground  
fg =>Brings the most recent job to foreground  
fg n =>Brings job n to the foreground

## FILE PERMISSION RELATED

chmod octal file-name =>Change the permissions of file to octal  
Example  
chmod 777 /data/test.c =>Set rwx permission for owner,group,world  
chmod 755 /data/test.c =>Set rwx permission for owner,rx for group and world  
chown owner-user file =>Change owner of the file  
chown owner-user:owner-group file-name =>Change owner and group owner of the file  
chown owner-user:owner-group directory =>Change owner and group owner of the directory

## NETWORK

ip addr show =>Display all network interfaces and ip address (a iproute2 command,powerful than ifconfig)  
ip address add 192.168.0.1 dev eth0 =>Set ip address  
ethtool eth0 =>Linux tool to show ethernet status  
mii-tool eth0 =>Linux tool to show ethernet status  
ping host =>Send echo request to test connection  
whois domain =>Get who is information for domain  
dig domain =>Get DNS information for domain  
dig -x host =>Reverse lookup host  
host google.com =>Lookup DNS ip address for the name  
hostname -i =>Lookup local ip address  
wget file =>Download file  
netstat -tupl =>Listing all active listening ports

## COMPRESSION / ARCHIVES

tar of home.tar home =>Create tar named home.tar containing home/  
tar xf file.tar =>Extract the files from file.tar  
tar czf file.tar.gz files =>Create a tar with gzip compression  
gzip file =>Compress file and renames it to file.gz

## INSTALL PACKAGE

rpm -i pkgname.rpm =>Install rpm based package  
rpm -e pkgname =>Remove package

## INSTALL FROM SOURCE

./configure  
make  
make install

## SEARCH

grep pattern files =>Search for pattern in files  
grep -r pattern dir =>Search recursively for pattern in dir  
locate file =>Find all instances of file  
find /home/tom -name 'index\*' =>Find files names that start with "index"  
find /home -size +10000k =>Find files larger than 10000k in /home

## LOGIN (SSH AND TELNET)

ssh user@host =>Connect to host as user  
ssh -p port user@host =>Connect to host using specific port  
telnet host =>Connect to the system using telnet port

## FILE TRANSFER

scp  
scp file.txt server2:/tmp =>Secure copy file.txt to remote host /tmp folder  
rsync  
rsync -a /home/apps /backup/ =>Synchronize source to destination

## DISK USAGE

df -h =>Show free space on mounted filesystems  
df -i =>Show free inodes on mounted filesystems  
fdisk -l =>Show disks partitions sizes and types  
du -ah =>Display disk usage in human readable form  
du -sh =>Display total disk usage on the current directory  
findmnt =>Displays target mount point for all filesystem  
mount device-path mount-point =>Mount a device

## DIRECTORY TRAVERSE

cd .. =>To go up one level of the directory tree  
cd =>Go to \$HOME directory  
cd /test =>Change to /test directory

