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-nam	=>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 cf 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
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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