LINUX COMMANDS CHEAT SHEET

SYSTEM

```
#uname -a          =>Displaylinux system information
#uname -r          =>isplay 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
#killpid           =>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                =>Lists stopped or background jobs
#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,rw 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

```
#ifconfig –a       =>Display all network ports and ip address
#ifconfig eth0     =>Display specific ethernet port
#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     =>List active connections to / from system
```

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
```

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
```

DIRECTORY TRAVERSE

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

MORE DETAILED : HTTP://LINOXIDE.COM/GUIDE/LINUX-COMMAND-SHELF.HTML