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