

# < *LINUX COMMANDS...* >

A compilation of all linux commands alphabetically \_  
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**A**

**about:cache** = type this in firefox url and it gives cache size  
**alias** = lists aliases  
**apropos php** = info about php modules  
**alsactl -v** = prints alsa mixer's version  
**amixer** = info about amixer component  
**amixer info** = info about amixer  
**amixer -c** = available amixer controls  
**anacron -v** = version of anacron  
**aplaymidi -v** = version of aplay  
**apm -v** = version of apm  
**apropos php** = info about all php modules  
**arecord -v** = version of arecord

**B**

**bc** = starts a command line calculator

**C**

**cal** = shows calendar  
**cal 2009** = shows 2009 calendar  
**cal -j** = prints current month's calendar where days are numbered  
**cal -m** = prints current month's calendar where Monday is the 1st day  
**cal -y** = prints current year's calendar  
**cal 12 2005** = prints December month of 2005  
**cat /var/log/yum.log | grep mysql** = mysql

install and update dates

**cat /proc/meminfo** = prints memory info  
**cat /proc/cpuinfo** = prints cpu info  
**cat /proc/devices** = list of devices  
**cat /proc/statistics** = disk statistics  
**cat /proc/filesystems** = file system info  
**cat /proc/interrupts** = IRQ channel assignments  
**cat /proc/iomem** = physical memory addresses  
**cat /proc/ioport** = virtual memory addresses  
**cat /proc/keys** = list of keys kept by kernel  
**cat /proc/loadavg** = shows 1 5 15 min load averages  
**cat /proc/misc** = list of devices  
**cat /proc/modules** = list of loaded modules  
**cat /proc/mounts** = list of mounts  
**cat /proc/partitions** = list of partitions  
**cat /proc/mdstat** = RAID status  
**cat /proc/stat** = kernel statistics  
**cat /proc/swaps** = list of swaps  
**cat /proc/uptime** = uptime in seconds  
**cat /proc/version** = kernel version  
**cat /var/xyz.txt** = prints output of a file  
**cat /selinux/enforce** = current status of selinux  
**cat /etc/shells** = lists all installed shells on the os  
**cat /etc/inittab** = info about run levels  
**cat filename | sort** = sorting output in

alphabetical order

**cat filename.txt | less** = shows contents of the file, scroll bar fixed, q to quit  
**cat filename.txt | more** = shows contents of the file, page by page, spacebar to another page  
**cat /etc/x11/xorg.conf** = monitor info  
**cat -s filename.txt** = shows consecutive blank lines as one  
**cat -n filename.txt** = shows all lines with numbers  
**cat -b filename.txt** = shows only none-blank lines with numbers  
**cat filename.txt | head** = gives top 10 lines ie head of the file  
**cat filename1 filename2 > filename3** = merges the files  
**cat filename1 filename2 >> filename3** = adds contents to another files  
**cat /etc/fstab** = list of all devices  
**cat /etc/filesystems** = of file systems  
**cat /etc/fedora-release** = Fedora release/version no  
**cat /etc/issue** = Linux distro name  
**cat /var/log/messages | grep -F ntpd** =  
**cat /var/log/wtmp** = lists all logins and logouts  
**cat /run/utmp** = lists last reboots and shutdowns  
**cat /bin/lis | strings** = lists all ASCII text in ls  
**cat abc.txt | tr '[a-z]' '[A-Z]'** = converts file

into uppercase

**cat abc.txt | tr '[a-z]' '[A-Z]' > uppercase.txt** =  
converts file into a new file

**cat /usr/include/asm/unistd.h** = list of system  
calls

**cat /usr/include/asm/unistd.h | wc -l** =  
number of system calls

**cd /** = takes into root directory

**cdrecord -scanbus** = lists available cd/dvd  
devices

**chkconfig --list mysqld** = mysql configuration  
details

**chsh username /bin/bash** =

**chsh -s new-shell username** = change the  
default shell to a new one

**clear** = clears the screen/prompt

**chmod o=rwx, g=rw, u=r /usr/local/bin** =  
change file permissions

**chmod ogu=rwx /usr/local/bin** = change file  
permissions

**convert imagename.jpg imagename.png** =  
converts jpg image into png

**convert imagename.gif imagename.bmp** =  
converts gif image into bmp

**convert imagename.tiff imagename.pcx** =  
converts tiff image into pcx

**convert -resize 340x140 image1.jpg**

**image2.jpg** = resizes jpg image

**convert -sample 50%x50% image1.jpg**

**image2.jpg** = resizes jpg image

**convert -rotate 90 image1.jpg image2.jpg** =  
rotates jpg image 90 degrees

**convert -fill blue -pointsize 80 -font helvetica**  
**-draw 'text 10,50 "my image"' img1.jpg**

**img2.jpg** = inserts text into jpg image

**convert -thumbnail 120x120 a.jpg b.png** =

converts jpg image into png image

**convert -thumbnail 120x120 -polaroid 8 a.jpg**

**b.png** = converts into polaroid picture

**convert -thumbnail 120x120 -polaroid 8 -**

**rotate 8 a.jpg a-c.png** = converts and rotates

**convert -sepia-tone 75% imga.jpg imgb.png** =  
changes tone of image

**convert -charcoal 5 house.jpg char-house.png**  
= changes tone of image

**convert -colorize 175 house.jpg color-**  
**house.png** = changes color of image

**Ctrl+Alt+delete** = restarts Linux

**Ctrl+Alt+backspace** = restarts login screen

**Ctrl+Shift+Ins(Insert)** = pasting something

from other source ie web page etc to  
command prompt

**Ctrl+C** = clear the command line if the output  
keeps running.....

----- **D** -----

**date** = prints today's date

**date '+%A %B %d %G'** = display day, month,  
day of month, year

**date '+The date today is %F.'** = displays date  
in yyyy-mm-dd format

**date --date='2 weeks'** = displays date two  
weeks from today

**date --date='20 days'** = displays date 20 days  
from today

**date --date='2 months'** = displays date 2  
months from today

**date --date='2 years'** = displays date 2 years  
from today

**date --date='2 years 2 months 2 days'** =  
displays date 2 years 2 months 2 days from  
today

**date --date='14 Jul' +%A** = display day on  
which July 14 falls

**diff oldfile.txt newfile.txt** = checks difference  
between two files

**dig yahoo.com** = gives info about yahoo  
website

**dmesg** = a summary of hardware profile

**dmesg | head -n 5** = shows first 5 lines

**dmesg | head -5** = shows first 5 lines

**dmesg | tail -n 4** = shows last 4 lines

**dmesg | tail -4** = shows last 4 lines  
**dmesg | grep ATA** = shows lines containing ATA  
**dmidecode** = BIOS info  
**dmidecode | head -n10** = first 10 lines of BIOS info  
**dmidecode --type baseboard** = baseboard info  
**dmidecode --type cache** = cache info  
**dmidecode --type chassis** = chassis info  
**dmidecode --type connector** = connector info  
**dmidecode --type memory** = memory info  
**dmidecode --type processor** = processor info  
**dmidecode --type slot** = slot info  
**dmidecode --type system** = system info  
**dmidecode --type wrongtype** = gives right words/types

**dos2unix abc.txt xyz.txt** = converts file into unix format

**dvdrecord -scanbus** = lists dvd devices

**df -h** = free hard drive space  
**df** = free hard drive space  
**du -sh** = disk usage  
**du -h** = hard drive usage

**dialog --msgbox "Hello" 8 12** = create dialog box

**dialog --title "Check me" --checklist "Pick numbers" 12 15 2 1 "First" "on" 2 "Second" "off"** = create checklist

-----**E**-----

**echo \$SHELL** = prints the default shell name  
**echo \$OSTYPE** = prints the operating system name  
**echo 'text'** = prints what is held in the quotes  
**echo \$HOME** = prints home directory  
**echo \$USER** = who is currently using the system  
**echo \$HISTFILE** = location of history file  
**echo \$HISTFILESIZE** = history's set size  
**echo \$HISTSIZ** = history's set size  
**echo "test" | mail -v -s test xyz@abc.com** = sending e-mail from a terminal

**ethtool eth0** = info about ethernet connection  
**ethtool -i eth0** = driver for ethernet  
**ethtool -S eth0** = statistics for ethernet  
**ethtool l0** = info about local loop

**egrep "one/two/three" filename** = looks for any of these 3 words in a file  
**env** = prints all environment variables  
**expr 7 + 8** = simple command based calculator (mind the spaces in the equation)

**/etc/init.d/httpd status** = service status  
**/etc/init.d/mysqld start** = starts mysql server  
**/etc/init.d/oracle-xe start** = starts oracle server

**exec ls -l** = runs ls command and closes the terminal  
**exec uptime** = runs uptime command and closes terminal

-----**F**-----

**fc -l** = short command history  
**fdisk -l** = list of partitions on the hdd  
**fdisk -l /dev/hda** = partitions within a specific partition  
**fdisk /dev/hda** = master device on IDE channel 0  
**fdisk /dev/hdb** = slave device on IDE channel 0  
**fdisk /dev/hdc** = master device on IDE channel 1  
**fdisk /dev/hdd** = slave device on IDE channel 1

**find /usr/bin -amin -30** = finds files accessed in last 30 minutes in /usr/bin  
**find /usr/bin -atime +50** = finds files not accessed for than 50 days  
**find /usr/bin -perm 750** = finds files with permission 750

**find /usr/bin -user root** = finds files owned by root in /usr/bin  
**find /usr/bin -user root | wc -l** = calculates total no of files owned by root  
**find ! /usr/bin -user root** = finds files not owned by user root  
**find ! /usr/bin -user root | wc -l** = calculates no of files not owned by root  
**find -iname filename.ext** = finds a file by name  
**find .** = lists all files and subdirectories in the current directory  
**find . -size +200M** = finds files more than 200M in size  
**find . -size +200M -ls** = more details  
**find . -name \*.txt -size +40K** = finds .txt file names of more than 40 k in size  
**find /usr/share/docs | xargs grep -l 'keyword'** = finds files that contain the keyword from documents  
**finger** = log in details  
  
**free** = memory usage in kb  
**free -b** = memory usage in mb  
**free -m** = memory usage in blocks  
**free -mt** = memory usage in totals  
**free -g** = memory usage in gigabytes  
**free -s 5** = update memory usage every 5 seconds  
  
**fuser -amuv /boot** = shows processes with

/boot open (a = all, m = man, u = user, v = verbose)  
**fuser /boot** = shows parent pids for processes opening /boot  
**fuser -m /boot** = shows pids for processes opening /boot  
**fuser -u /boot** = shows pids for user files open  
**fuser -k /boot** = kills all processes with /boot files open  
**fuser -l** = lists supported signals  
**fuser -k -HUP /boot** = kills all processes running /boot by sending HUP signal



**getenforce** = status of selinux  
**gdmsetup** = display configuration client/gui  
**glxinfo** = graphics card info  
**glxinfo | direct** = check if direct rendering is on  
  
**gnome-terminal -x alsamixer** = starts terminal with alsamixer displayed  
**gnome-terminal -tab -tab -tab** = starts terminal with 3 open tabs  
**gnome-terminal -geometry 80\*20** = starts terminal 80 characters and 20 lines  
**gnome-terminal -zoom=2** = starts terminal with larger fonts  
  
**grep india /usr/share/dict/words** = looks for

the word 'india' in dictionary  
**grep "word" filename.txt** = prints lines with the "word" in them  
**grep -color "word" filename.txt** = prints lines with the word in color  
**grep 300 filename.txt** = prints lines with 300 in them  
**grep -n "word" filename** = line numbers with the word in them printed  
**grep -vn "word" filename** = lines without the "word" in them  
**grep -c "word" filename** = total no. of occurrences of "word"  
**grep -n "word" \*** = lists all lines from all files that contain "word"  
**grep -R myword /etc/bin\*** = lists lines with their file names in the directory containing myword  
**grep -h -R myword /etc/bin\*** = lists lines without their file names containing myword  
**grep -Rn myword /etc/bin\*** = lists lines containing myword with their numbers  
**grep -color -R myword /etc/bin\*** = lists lines in the directory containing myword in color  
**grep -Rl myword /etc/bin\*** = lists file names in the directory containing myword  
**grep -x "word" \*** = only "word" a line  
**grep word filename.txt** = searches for the word in the file (case sensitive)  
**grep word -n filename.txt** = lists lines containing word with their numbers

**grep -i word filename** = searchers for the word in the file (i = not case sensitive)  
**grep -i word1 word2 filename** = searchers for the word in the file  
**groups** = list of groups

**gzip** = only zips, **gunzip** = unzips + untars, **tar** = zips + unzips with **czvf**, **xzvf**  
**gzip abc.txt** = zips a file  
**gzip -1 abc.txt** = fast compression but poor quality  
**gzip -9 abc.txt** = slow compression but good quality  
**gzip -rv foldername** = zips all files in the folder  
**gzip -tv abc.txt.gz** = checks integrity if gz file with verbose  
**gzip -lv abc.txt.gz** = gives info about gz file  
**gunzip -v abc.txt.gz** = unzips gz file with verbose  
**gunzip -c abc.tar.gz | tar x** = unzips and untars a file (two steps)  
**gunzip abc.tar.gz; tar xf abc.tar** = unzips then untars a file (two steps)

-----**H**-----

**hal-device-manager** = opens a gui for hardware profiling  
**head -6 .bash\_history** = first 6 commands  
**head -5 filename.txt** = prints first 5 lines of

the file  
**head -n 5 filename.txt** = prints first 5 lines of the file

**history 5** = last five commands  
**history | wc -l** = total history commands  
**history | grep rpm** = search through history for rpm commands  
**history** = list of all commands used so far

**hostname** = name of the host  
**hwclock --show** = prints today's date and time  
**hwclock --set --date = "2/22/2008 12:25:30"** = reset new time and date

-----**L**-----

**identify imagename.jpg** = gives image info  
**identify -verbose imangename.jpg | less** = gives info about image  
**identify -verbose imangename.jpg | more** = gives more info about image  
**id** = info about user/root's groupid/uid etc  
**ifconfig** = network card info, ipaddress etc.  
**ifconfig -a** = available network cards  
**info coreutils** = info about core commands  
**iostat 3** = checks disk reads  
**iostat -c 3** = updates cpu usage  
**iostat -c -t** = cpu usage with time  
**iostat -c -t 2 10** = repeat cpu usage info every 2 seconds 10 times

**ip a** = available network interfaces  
**ip addr** = ip addresses by method of connection ie ppp0  
**ip addr show eth0** = ip address for ethernet connection  
**ip calc -bnm 192.168.0.1/27** = displays netmask ip from CIDR  
**ip route** = checks routing table  
**isoinfo** = info about iso  
**iwconfig** = checks for wireless connection  
**iwlist** = checks for a wireless access point

-----**K**-----

**kded --version** = kde version  
**kde-config --version** = kde version

**kill 23456** = kills process with id 23456  
**kill -9 1234** = sends SIGKILL to id 1234  
**kill -SIGCONT 1234** = sends SIGCONT to id 1234  
**kill 4%** = kills the process represented by 4% job  
**kill sttd** = kills all sttd daemons running

-----**L**-----

**last** = last log in details  
**lastlog [-u root]** = last log in time  
**last [root]** = entire log in history, the feature needs to be activated first

**lastb [root]** = prints failed login attempts

**less filename.txt** = prints contents of the file, scroll bar fixed, Press q to quite and spacebar to go to another page

**less filename.txt** = prints contents of the file, scroll bar fixed, press spacebar

**less filename /word** = searches for word

**ln -s originalfile newfile** = creates a symbolic link to new file

**locate xyz** = locates file xyz case-sensitive

**locate -i xyz** = locates file xyz not case-sensitive

**locate -r /ls\$** = locates files ending in /ls

**locate -r james\*bond** = locate files with james and bond in their names

**locate -r ^ boot/grub/me** = locate files beginning with boot/grub/me

**locate \*.jpg > Desktop/myjpgs.txt** = stores results of search in a file named myjpgs.txt

**lsmod** = lists kernel modules installed

**lsmod | sort -k 2,2n** = sorts kernel modules in increasing size order

**ls /var/www/html/\*.html** = lists all html files

**ls .?\*** = lists all directory names that start with a dot .

**ls /etc/rc.d** = prints all directories for all available run levels

**ls /etc/rc.d/init.d** = list of system services'

scripts

**ls -l** = lists files and folders in the current directory

**ls -la** = lists hidden files and folders in the current directory with a dot

**ls li** = files with their inodes

**ls -lt** = files recently modified

**ls -lu** = lists files by their accss time

**ls -ln** = user names and groups numerically displayed

**ls -lh** = human readable file sizes

**ls -lR** = displays all the files and their folders

**ls -F** = lists files by type

**ls -c** = lists files columnwise

**ls -color** =always = shows filenames in colors

**ls -l /var/lib/rpm** = rpm database

**ls** = lists contents of a directory

**ls .** = lists contents of a directory

**ls ..** = lists contents of a directory

**ls /** = lists all system directories

**ls** = lists directories in current directory

**ls /var** = lists all subdirectories under the /var directory

**ls /proc | wc -l** = number of subdirectories in /proc directory

**ls -ltr** =

**ls -l filename.ext** = checks permissions for a file

**ls -l /etc** = permission status of all subdirectories

**ls -a** = shows hidden . Dot directories. A kind of special configuration files not be messed with

**ls tr | '\n' ' '** = replaces all newline characters with spaces

**ls tr | -d '\n'** = deletes newlines

**ls /var/lib/mysql** = list of databases in blue color

**lsdf** = list of open directories and files

**lsdf -c bash** = list of files open by bash shells

**lsdf -d cwd** = list of directories open as current working directory

**lsdf -u james** = list of files and directories open by user james

**lsdf /mnt/sda1** = list of anything open on /mnt/sda1 file system

**lsdf +d /mnt/sda1/dx** = list of anything open under /mnt/sda1/dx directory

**lpadmin** = Linux printer details

**lspci** = info about pci devices/ports

**lspci | grep VGA** = graphics card info

**lspci | grep audio** = audio card info

**lspci | grep -i modem** = modem info

**lspci | grep -i usb** = usb ports info

**lspci | grep -i ethernet** = ethernet card info

**M**

**man -f php** = info about php modules  
**man -k php** = info about php modules  
**man php** = php manual pages  
**man man** = info about manual pages and their format  
**man 3 php** = shows entries for php in 3rd section of the manual  
**man php | grep word** = searches for a particular word in php manual  
**man hier** = info about directories  
**md5sum xyz.iso** = checksum verification  
**more filename.txt** = shows contents of a file page by page (press spacebar)  
**mount** = files system type per device  
mount /mnt/cdrom = mounts cd rom  
**mysql** = launches mysql  
**mysql -u root -p** = asks for a password to launch mysql  
**my old.txt new.txt** = renames a file

**N**

**netstat** = info about active Internet connections  
**netstat -i** = netstat statistics  
**netstat -tanp** = shows active tcp connections  
**netstat -uanp** = shows active udp connections

**O**

**od -c -t x1 filename.txt** = list of newline characters in Linux  
  
**ogg123 mysong.ogg** = plays ogg file  
**ogg123 http://xyz.com/music/audio.ogg** = plays from web address  
**ogg123 -z \*.ogg** = play files in pseudo-random order  
**ogg123 -Z \*.ogg** = same -z, but repeats forever  
**ogg123 /var/music/** = plays songs in /var/music and sub dirs  
**ogg123 -@myplaylist** = plays songs from playlist

**P**

**pgrep httpd** = gives process id for httpd  
**pgrep -l init** = gives process id for processes containing init as string  
**ps -lu james** = all processes owned by james  
**php --help** = shows all php help pages in full  
**php --help | less** = shows limited php help pages, scroll bar fixed, q to exit  
**php -v** = php version  
**php --version** = php version  
**pirut** =  
**passwd** = asks for a new password for root

**play musicfilename.wav** = plays music file  
**play \*.wav** = plays all wav files upto 32  
**play audio.au vol. 6** = plays audio file with volume level 6  
**play -r 12000 short.aiff** = sampling rate of 12000

**ps ajfx** = process hierarchy in BSD style  
**ps ax** = lists all running processes  
**ps aux** = lists all running processes with BSD cycle  
**ps auwx** = running processes with wide format  
**ps auwxw** = running processes with unlimited width  
**ps auwx | sort -r -k 4,4** = sort processes on descending memory usage  
**ps auwx | head -4** = prints first 4 lines of a process  
**ps auwx | head -n 4** = prints first 4 lines of a process  
**ps auwx | tail -4** = prints last 4 lines of a process  
**ps auwx | tail -n 4** = prints last 4 lines of a process  
**ps auwx | less** = shows contents of a process, scroll bar fixed  
**ps auwx | more** = shows contents of a process page by page (press spacebar)  
**ps auwx | grep init** = shows lines containing init in them

**ps auwx | grep "[\*]"** = shows bracketed comments  
**ps** = list of processes by current user in current shell  
**ps -C httpd** = process info for http  
**ps -p 5323 -o pid,ppid,bsdtime,args** = process info for id 5323  
**ps -U james,john -o pid,ruser,TTY,stat,args** = process info for 2 users  
**ps -e** = lists all running processes  
**ps -e | wc -l** = number of all running processes  
**ps -ef** = lists all running processes with format listing  
**ps -ef --forest** = process hierarchy in forest format  
**ps -eF** = lists all running processes with full format listing  
**ps -ejH** = process hierarchy  
**ps -el** = lists all running processes with long listing  
**ps -eo ppid,user,%mem,size,vsize,comm --sort=-size** = multiple parameters  
**ps -eo ppid,user,bsdstart,bsdtime,%cpu,args --sort=-%cpu** = multiple parameters  
**ps -eo ppid,user,bsdstart,bsdtime,%cpu,args --sort=-%cpu** = multiple parameters  
**ps -eo ppid,user,stat,tname,sess,cputime,args --sort=user** = multiple parameters  
**pstree** = processes in alphabetical order in

tree format  
**ps -u root** = list of processes run by user root  
**ps -u root u** = list of processes run by root with cpu usage  
**ps -fu root** = list of processes run by root with PPID  
**pwd** = current working directory  
**pwd -P** = one level up from current working directory  
**pwd -L** = one level down from current working directory

**printenv | less** = prints all environment variables  
**ps -ef | grep root** = processed owned by root

-----**R**-----

**ramsize** = info about ram  
**reboot** = reboots the pc  
**redhat-logviewer** = opens a GUI tool for log monitoring  
**repoquery -il tomcat5** = list of files in tomcat5 package in any repo  
**repoquery --provides php** = info about php modules

**rm ~/.bash\_history** = clears history of commands  
**rm -f \*.doc** = removes/deletes all files of .doc extension in a folder

**rpm2cpio xyz.rpm > xyz.cpio** = extracts cpio archive from rpm package  
**rpm2cpio xyz.rpm | cpio -tv** = lists the contents of archive  
**rpm -e xyz** = removes package xyz  
**rpm -e --nodeps xyz-5.6.fc5.i386** = removes 32+ bit version of package if more versions available  
**rpm -ivh xyz.rpm** = install package xyz (i=install, v=verbose, h=hash)  
**rpm -ivh http://ftp.abc.com/xyz.rpm** = install package xyz from the site  
**rpm -Uvh xyz.rpm** = update package xyz (U=update)  
**rpm -q --scripts kernel | less** = list of all preinstall & post-install scripts  
**rpm -q php** = php version no.  
**rpm -qi php** = php install info  
**rpm -qi fedora-release** = Fedora installation info  
**rpm -qi php/per/python/ruby** = version info for the package  
**rpm -qa grun** = prints grub version no.  
**rpm -qa php** = prints php version no.  
**rpm -qa | sort | pr -column=2 | less** = shows installed packages in 2 columns per page  
**rpm -qa | sort | pr -column=2 > abc.txt** = saves output to a file  
**rpm -qa | sort | pr -column=2 | lpr** = sends output to a printer

**rpm -qa | grep kernel | sort** = sorts installed packages in alphanumeric order  
**rpm -qa | grep kernel | sort -r** = sorts in reverse alphanumeric order  
**rpm -qa | grep php** = prints version nos. of all php related packages  
**rpm -qa | head** = only 10 softwares listed  
**rpm -qa | head -n5** = first 5 software listed  
**rpm -qa | wc -l** = total no of packages installed on the system  
**rpm -ql php** = lists all files in a particular package  
**rpm -qal | grep php** = find php in all installed packages  
**rpm -ql php | wc -l** = total no. of files in a particular package  
**rpm -qa | grep php | wc -l** = count the total number of php modules  
**rpm -qf /var/lib/php** = what package a particular file belongs to  
**rpm -q --scripts mysql** = scripts of a package  
**rpm -qa php | wc -l** = total no. of php packages  
**rpm -qi php** = info about php  
**rpm -q --last php** = installation date of php  
**rpm -qi php | grep -i vendor** = php vendor name  
**rpm -qi fedora-release | grep -i vendor** = prints vendor name from a file named fedora-release  
**rpm -v** = rpm version

**rpm -qa --queryformat**  
**'%{NAME}==%{VENDOR}\n' | grep -v "Red Hat" | sort** = list of installed packages with their vendor names except Red Hat  
**rpm -qa --qf '%{NAME}==%{VENDOR}\n' | grep "Red Hat" | sort** = list of installed packages with their vendor name as Red Hat  
**rpm -qa --qf '%{NAME}==%{VENDOR}\n' | sort** = list of installed packages with their vendor names  
**rpm -qa --qf '%{NAME}==%{VENDOR}\n' | grep "Red Hat" | wc -l** = total number of installed packages with Red Hat as their vendor

**rpm -qa --qf '%{NAME}==%{LICENSE}\n' | sort** = list of all installed packages with their licence type sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{LICENSE}\n' | wc -l** = total number of installed packages with their licence type  
**rpm -qa --qf '%{NAME}==%{LICENSE}\n' | grep php | sort** = list of all php packages with their licence types sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{LICENSE}\n' | grep php | wc -l** = total number of all php packages with their licence types

**rpm -qa --qf '%{NAME}==%{SIZE}\n' | sort** = list of all installed packages with their names and sizes in bytes sorted alphabetically

**rpm -qa --qf '%{NAME}==%{SIZE}\n' | grep php | sort** = list of all php packages with their names and sizes in bytes sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{SIZE}\n' | grep php | wc -l** = total number of installed php packages with their names and sizes in bytes

**rpm -qa --qf '%{NAME}==%{SUMMARY}\n' | sort** = list of all installed packages with their names and functions sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{SUMMARY}\n' | grep php | sort** = list of all php packages with their names and functions sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{SUMMARY}\n' | grep php | wc -l** = total number of all php packages with their names and functions

**rpm -qa --qf '%{NAME}==%{BUILDHOST}\n' | sort** = list of all installed packages with their names and buildhosts sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{BUILDHOST}\n' | grep php | sort** = list of all php packages with their names and buildhosts sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{BUILDHOST}\n' | grep php | wc -l** = total number of all php packages with their names and buildhosts

**rpm -qa --qf '%{NAME}==%{URL}\n' | sort** = list of all installed packages with their names

and urls sorted alphabetically

**rpm -qa --qf '%{NAME}==%{URL}\n' | grep php | sort** = list of all php packages with their names and urls sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{URL}\n' | grep php | wc -l** = total number of all php packages with their names and urls

**rpm -qa --qf '%{NAME}==%{ARCH}\n' | sort** = list of all installed packages with their names and architecture type sorted alphabetically  
**rpm -qa --qf '%{NAME}==%{ARCH}\n' | grep php | sort** = list of all php packages with their names and architecture type sorted alphabetically

**rpm -qa --qf '%{NAME}==%{ARCH}\n' | grep php | wc -l** = total number of all php packages with their names and architecture type

**rpm -querytags** = list of all rpm query tags  
**rpm -querytags | wc -l** = total number of rpm tags  
**rpm -Va** = verify all installed packages  
**rpm -Va | grep php** = verify php packages only  
**rpm -Vv | grep php** = check php packages only with verbose

**root** = superuser, who has permission to do anything  
**/root** = root accounts home directory

## S

**sha1sum xyz.iso** = checksum verification  
**stat filename** = prints access/modification right to a file  
**set** = list of all environmental variables  
**set | wc -l** = total number of environmental variables  
**set history = 60** = history of commands set to 60  
**set | less** = prints all shell variables, scroll bar fixed

**setserial -g /dev/ttys0 /dev/ttys1 /dev/ttys2 /dev/tty3** = info about serial ports  
**setserial -ga /dev/ttys0** = info about one serial port  
**stty -F /dev/ttys0 -a** = info about serial port

**service httpd start** = starts apache server  
**service mysqld start** = starts mysql server  
**service --status-all** = service status of all the services installed

**shutdown** = shutdowns the pc  
**shutdown -r** = reboot  
**shutdown -0 (Zero)** = reboot  
**shutdown -h** = halt

**sort filename | uniq** = sorting only unique lines in output

**sortsorttempfile** = sorted in a separate file

**/sbin/ifconfig** = network info  
**/sbin/lspci | grep -i vga** = graphics card info

**strings /bin/lc | grep -i libc** = finds all occurrences of libc in ls  
**strings /bin/lc** = lists all ASCII text in ls  
**su -c 'gedit /etc/yum.conf'** = opens yum.conf file in gedit

## T

**tail -3 ok** = last 3 lines from a file named ok  
**tail -6 .bash\_history** = last 6 commands  
**tail -5 filename.txt** = prints last 5 lines of the file to the screen  
**tail -n 5 filename.txt** = prints last 5 lines of the file  
**tail -f /var/log/messages** = updates size of text file as it gets bigger  
**tail -f /var/log/messages** = displays system messages live  
**tail -f /var/log/maillog** = displays mail server messages live  
**tail -f /var/log/httpd/access\_log** = displays web server messages live  
**tar cvf abc.tar abc.txt** = tars a file with verbose

**tar xvf abc.tar** = untars a file with verbose  
**tar c abc.txt | gzip -c > abc.tar.gz** = archives file and zips a file (two steps)  
**tar czf abc.tar.gz abc.txt** = archives and zips a file (one step, z = unzip, c = create)  
**tar czvf abc.tar.gz abc.txt** = archives and zips a file with verbose  
**tar cjvf abc.tar.bz2 abc.txt** = archives and zips a file with bzip2  
**tar xzvf abc.tar.gz** = unzips and untars file (one step, x = untar)  
**tar xjvf abc.tar.bz2** = unzips and untars file (one step, j = bzip2)

**time** = prints current time  
**time yum/command name** = command's execution time  
**top** = lists process with cpu usage  
**top -d 5** = changes update delay to 5 seconds (from default 3)  
**top -u james** = process info for user james  
**top -p 190,2690** = process for for id 190 and 2690  
**top -n 10** = refreshes the screen 10 times before quitting  
**top -b** = runs in non-interactive non-screen-oriented mode  
**touch name.txt** = creates a file named name.txt  
**touch /var/log/btmp** = enables recording of bad attempts

**tree -dx** = directory structure of the os  
**type php** = path of executables/shell commands

**tr a A < filename.txt** = replaces a with A  
**tr -d a < filename.txt** = deletes all a characters

----- **U** -----

**uname** = operating system name  
**uname -a** = architecture type  
**uname -r** = Linux version  
**uname -o** = operating system name  
**uname -m** = system architecture  
**uname -n** = host name  
**uname -p** = processor architecture  
**uname -s** = os name  
**uname -v** = Linux update time  
**uname --hardware-platform**  
**uuidgen** = strange key  
**ulimit -a** = limit on a variety of system resources  
**umount /mnt/cdrom** = unmounts cd rom  
**uptime** = how long the computer has been up and running

**unix2dos abc.txt xyz.txt** = converts file into dos format

**/usr/share/background/images** = database of background images

----- **V** -----

**/var/log/lastlog** = login database, open with vi etc  
**/var/log/wtmp** = history of all logins and attempts

**vmstat** = virtual memory usage  
**vmstat 5** = updates virtual memory every 5 seconds  
**vmstat -k** = virtual memory in 1000-byte kilobytes  
**vmstat -K** = virtual memory in 1024-byte kilobytes  
**vmstat -m** = virtual memory in 1000-kilobyte megabytes  
**vmstat -M** = virtual memory in 1024-kilobyte megabytes  
**vmstat -m | less** = kernel memory slab  
**vmstat -S M -s | less** = displays statistics in megabytes

-----**W**-----

**watch 'cat /proc/loadavg'** = check command output every 2 seconds, press Ctl+C to stop...  
**watch -n 10 'ls -l'** = checks command output every 10 seconds  
**watch 'ls -l download.jpg'** = checks file size as it is being downloaded  
**wc -w filename** = no. of words in a file  
**wc -l filename** = no of lines  
**whatis php** = info about php modules  
**whatis php-pdo** = info about php-pdo module  
**whereis php** = locations of php binary, source and man pages  
**whereis -m php** = location/path of the php manual  
**whereis -m php | awk '{print \$2}'** = 2nd part of the command output  
**which php** = full path of executables/shell commands  
**who | sort** = names of users logged in  
**who | wc -l** = no of users  
**whoami** = who is logged in  
**who** = who is logged in  
  
**wget ftp.foldername.xyz.jpg** = downloads a file

-----**X**-----

**xrandr -q** = screen resolution

-----**Y**-----

**yum clean all** =  
**yum clean headers** =  
**yum clean metadata** =  
**yum clean packagename** = clean packages left in cache  
**yum --enablerepo=livna install mplayer** = enable livna repo & install mplayer  
**yum --disablerepo** = livna search php = disable livna repo and search other repos for php  
**yum groupinfo** =  
**yum grouplist** =  
**yum groupinstall XFCE** = installs entire group XFCE  
**yum groupremove php** = remove entire php group  
**yum groupupdate XFCE** = updates for group XFCE  
**yum install php/perl/etc** = installs packages  
**yum install php\*** = installs all php packages  
**yum install hwbrowser** =  
**yum install lshw** =  
**yum list available** = lists all packages available for installation  
**yum list extras** – packages not installed from any repo  
**yum list installed** = lists all installed softwares  
**yum list php\*** = lists all php packages  
**yum list updates** = updates available  
**yum list updates php** = updates available for

php  
**yum localinstall xyz.rpm** = installs packages from the HDD or CD/DVD  
**yum remove php** = remove php  
yum search "php" =  
**yum update php/perl/etc** = updates packages  
**yum whatprovides php** =

-----**Terminologies:**-----

. = current directory  
.. = parent directory  
!! = repeat the last command  
!1003 = call a particular command  
!?php? = run last command containing the string php  
!rpm = run the last rpm command  
!yum = run the last yum command  
fc 140 = opens command number 140 in vi editor  
per\* = without asteriks press 'Tab' key once to complete the command

Using Command Line Completion :  
tracer = Completes to traceroute command  
cd /home/ch = Completes to /home/chris directory  
cd ~jo = Completes to /home/john  
echo \$PA = Env variable completion:

Completes to \$PATH  
ping = Show hosts from /etc/hosts

!# /bin/bash filename.sh = executing a shell script

/ = root directory for the entire system

Type the first few letters of a command and then press the 'Tab' key twice to list the commands that start with those letters. Press the 'Tab' key twice at an empty command prompt and you will get a list of all the commands.

Manual pages for each package ie php etc. are divided into 8 sections namely general user commands, system calls, programming routines, special files, configuration files, games, miscellaneous and administrative commands and respective daemons.

-----  
**How to install downloaded binaries:**

bunzip xyz.123.tar.bz2tar xyz.123./ configure  
make  
su -root (make sure you are root or someone with the install privilege)  
make install  
make clean

**Permissions:**

rwX rwx rwx  
1 2 3  
u g o  
  
u = user  
g = group  
o = other  
r = read = 4  
w = write = 2  
x = execute = 1

+ = add user  
- = remove user  
chmod o-r = remove/delete the read permission from other group  
g+w = add write permission to group

-----  
**MySQL:**

grant all privileges on \*.\* to root@"localhost"  
identified by 'password';  
grants all privileges on all databases to root

\*some yum commands are not written.  
Don't know what to write :p

**NOTES**

(intentionally kept blank for extra notes)