

Linux files ystem

/	root directory of the entire file system hirarchy
/bin/	Essential user command binaries
/boot/	static files of the boot loader
/dev/	device files
/etc/	host-specific system configuration
/home/	user home directories
/lib/	essential shared libraries and kernel modules
/media/	mount point for removable media such as USB
/mnt/	mount point for a temporarily mounted filesystems
/opt/	optional commercial software
/sbin/	system binaries
/usr/	user utilities and applications
/usr/s- hare/	shared files over the system
/root/	home directory for the root user

these are not all the filesystem directories ,but they're the most important to know

user accounts operations

sudo <co- mmand>	do a command as a super user (root)
passwd	change the user password
whoami	show the current user
who	show user detaled data
su <usern- ame>	switch user
sudo	make new user
adduser <username>	
sudo	add existing user to a group
adduser <username> <groupnam- e>>	
sudo	add the user to the sudoers
adduser <username>	file (giving him the root privilage)
sudo	
sudo deluser <username>	delete user account (doesn't remove his files in the home directory remove it yourself)

other

uname -a	displays detaled system information
free	display memory size (total,used and free sizes)
free -h	display memory size in human readable format
lsblk	list block devices
badblocks <device> -v	searches for bad sectors in device

other (cont)

badblocks	searches for bad sectors in
/dev/sda1 -v	sda1 and put the output in
> file	file

the > here is a part of the command

Navigating directories

cd <director- y>	change directory:go to the given directory
cd ~	change directory to home
cd ..	go up one directory
cd -	go to the previous working directory
ls	list directory contents
ls -l	use long listing format
ls -lh	use human readable long listing format
find <file or directory>	searchs for file or directory in the working directory
locate <file or directory>	searchs for file or directory in the whole system
pwd	print working directory
the '<' and '>' are not used in the command they're just for making things here obvious	

terminal tips

using up and down arrows	navigating throw your command history
ctrl+R	searching for previously typed command in your history
clear	clears terminal
history	view command history
<command> less	for long output commands: view only one page and give you the ability to navigate through output lines using arrow keys exit using Q
<command> more	for long output commands: view only one page and give you the ability to navigate through output pages using Enter exit using Q
<command> && <command>	perform two commands one after the other
man <command> or program>	show manual of that program or tool

operations on files and directories

cp <file> <target dir>	copy y file to a target directory
mv <file> <target dir>	move file to a target directory, and can be used to rename files
rm <file>	remove file
rm -r <dir>	remove directory recursively
rm -i	prompt for every removal
rm -v	explain what's being done
nano <file>	a terminal based text editor
chmod <mode> <file>	changes mode (permissions) of the file
chmod -R <mode> <dir>	change mode of directory and its contents recursively
chown <owner> <file>	change owner of the file
chown <owner> : <group> <file>	change owner and group of file
mkdir <dir name>	makes new directory
zip <archive name> <files to be archived>	make a .zip archive including the selected files
unzip <archive>	extract the archive in the working directory

apt package manager

apt search <package name>	search for package in the database
apt show <package name>	show detailed information about the package
sudo apt install <package name>	install package, if it's already installed it will search for updates for it, if it's already the last version it tell you that
sudo apt remove <package name>	remove installed package
apt list --installed	list installed packages
sudo apt autoremove	remove the packages that has no use
sudo apt update	update packages database
sudo apt upgrade	upgrade installed software
apt is just a front-end for apt-get so it won't be different if you use any of them but for some user interface enhancing	

