Linux from the Command Line

The command line environment is very rich

Many, many commands - Linux in a Nutshell lists 687!

Probably need to mention the file hierarchy before we start:
root
etc, bin, dev, usr, home, tmp, lib, sbin, var

There are other directories:
media, mnt, opt, proc,

Linux from the Command Line

Useful commands:

dir, ls, cd .., cd /, pwd

cp, mv, mkdir, rm

cat <filename> > tmp.txt

su -,   exit
also sudo su can be useful

ps aux | grep <string>
more, less
man, info, apropos

Linux from the Command Line

More useful commands!

```
top
dmesg
tail -40 /var/log/messages
tail -f /var/log/messages
script - terminate with exit or ctrl-d
shutdown -h now
init 0
shutdown -r now
reboot
init 6
```

Linux from the Command Line

Commands to do with modules
modprobe
lsmod
rmmod

Commands to do with devices
lspci
lsusb

Linux from the Command Line

updatedb

locate <name>

dd

rsync

Linux from the Command Line

Using repositories in Debian-based systems
apt-get
apt-cache search

aptitude install vim

dpkg -i myfile.deb

Linux from the Command Line

Using repositories in Red Hat/Centos systems

yum search
yum update

rpm -Uvh myfile.rpm

Linux from the Command Line

Unpacking an archive:

tar zxvf myfile.gz

Making an archive:

tar zcvf myarchivefile.gz /mydirectory

Linux from the Command Line

Remote access:
ssh username@remote_machine.com
or
ssh username@192.168.1.27

Secure copy:
scp myfile username@remote_machine:/home/somebody/

Linux from the Command Line

Commands to do with processes running on the machines:

top

run xeyes and kill some jobs:

kill -HUP <pid>
kill -9 <pid>
kill <pid>

Linux from the Command Line

Using Editors

Nano
very easy - gives a menu

Vi
has several modes
invoke with vi "new1"
press "i" to go into insert mode
enter text
press "esc" and ":" to go into command mode
enter "w" to write file
enter "wq" to write and quit

Linux from the Command Line

Using Editors, continued

vi cut and paste
Press "esc" to leave insert mode
yank with yy
put with p

delete with dd
delete 3 lines with 3d <enter>

find <text> using /<text>

in a terminal clear the screen with "clear" or ctrl-l

Linux from the Command Line

vi and emacs

There is an alternative editor called emacs
It presents a total environment
    so for example you can collect e-mail from within it
Vi can be found on every machine, and can be used remotely

Linux from the Command Line

Useful Books

O'Reilly:

Linux in a Nutshell

Learning the Vi Editor

Linux from the Command Line

QUESTIONS?