

Linux Command line

Log into the system using the login id : guest
You will be given the password in the lab

You can use `man <command>` to learn more about the command and flags to use with it.

Set 1:

File System Operations

Present working directory: `pwd` (display the name of my current directory on the screen)

Create directory: `mkdir <dirname>`
`mkdir -p ee673/2012-13/<email-id>`

Change to directory: `cd <dirname>`
`cd ee673/2012-13`
`cd ..`
`pwd`
`cd ee673/2012-13/<email-id>`

Create File: `touch <newname>;` or `cat > <newname>;` or `vi <newname>`
`cd ../../`
`pwd`

Copy directory: `cp -r <srcdir> <dstdir>`
`cp -r ~guest/ee673/2012-13/<email-id> /tmp/<email-id>`

Directory Listing: `ls [<dirname>]`
`ls ~guest/ee673/2012-13/<email-id>`

Delete directory: `rmdir <dirname>`
`rmdir ~guest/ee673/2012-13/<email-id>` (see if you can delete it)

Delete File: `rm <filename>`
`rm ~guest/ee673/2012-13/<email-id>/<newname>`
now try deleting directory `<email-id>` (did it work?)

Rename directory: `mv <oldname> <newname>`
`mv ~guest/ee673/2012-13/<email-id> ~guest/ee673/2012-`

13/<new-id>

Copy file: `cp <oldname> <newname>`
create a file `<anyname>`
`cp <anyname> <newname>`

Rename file: `mv <filename> <newfilename>`
`mv <anyname> <newfilename>`

Create Symbolic link: `ln -s <newfilename> <linkname>`

Create Hard link: `ln <newfilename> <anothernewname>`

Directory Listing: `ls -ali [<dirname>]`
(visit website: <http://linuxgazette.net/105/pitcher.html>)
what is the size of files `<newfilename>` `<anothernewname>`
what else does the listing show?

Echo: `echo "My first lab" > <newfilename>`

Display text file on terminal: `cat <filename>`
`cat <newfilename>`

Display text file page by page: `less <filename>`
`less <newfilename>`
check man page to find difference between cat and less

Set 2:

Program execution through shell at the terminal prompt

Running a program: `<pathname>`

locate programs like `ls`, `more`, `less` and note their paths

Hint: `/usr`

Running programs in a pipeline: `<p1> | <p2>`

`ls -al | more`

Redirecting standard output to file: `<p1> > <filename>`

`ls -ali > <myfile>`

Redirecting standard input from file: `<p1> < <FILENAME>`

create a file `ab` with alphabets `a-z` on separate lines

`tac < ab > ba`

see output of file `ba`

Running a program in the background: `<p1> &`

use `ps` command to see the list of processes running in the background

Current process list: `ps`

Disk free stat: `df`

`df -h`

`df`

Set 3:

Network related commands

Interface configuration: `ifconfig`

`ifconfig`

Note `ip address`

`netmask`

`Mac address`

Round trip delay measurement: `ping <hostname | address>`

`ping 172.31.1.1`

`ping 172.26.82.251`

`ping 172.26.82.254`

MAC address table: `arp -n`

Network route trace: `traceroute <hostname | address>`

`traceroute 172.31.1.1`

Name server lookup: `host <hostname | address>`

`nslookup`

`> www.iitk.ac.in.` (note the ip address)

`> 172.31.1.1` (note the hostname and domain)

Set 4:

editor

check on the system which text editors are installed and you are comfortable with which one. You will need to use one in the coming labs.