· Make Directory (**mkdir**):

o mkdir test\_dir

o mkdir -p test\_dir/test\_dir2/test\_dir3

· Remove Directory (**rmdir**)

o rmdir test\_dir/test\_dir2/test\_dir3 (Removes dir only if it’s empty)

o rm -rf test\_dir (Removes everything in the dir recursively. Be careful!!!)

· Navigation shortcuts:

o ctrl a (Brings cursor to beginning)

o ctrl e (Brings cursor to end)

o ctrl u (Deletes entire command line)

o ctrl w (Deletes with white space character delimiter)

o ctrl c (Cancels current command/process)

o ctrl r (Start typing to bring up commands from history)

· Print Working Directory:

o **pwd**

· History of commands:

o **history**

· Change Directory (**cd**):

o cd test\_dir

o cd test\_dir/test\_dir2/test\_dir3 (Use tab to auto complete. Tab twice to list)

o cd - (Change to previous dir)

o cd ~ (Change to home dir)

o cd .. (Change to dir one level up)

· List contents (**ls**)

o ls

o ls -lh (Detailed list with size in human readable format)

o ls -lah (Detailed list (including hidden files) with size in human readable format)

· Aliases (**alias**)

o alias ls=”ls -lah” (ls works as ls -lah henceforth. Put this in .profile file in home directory to have this enabled as soon as you login)

· Manual Pages (**man**)

o man ls

· Apropos (**apropos**)

o apropos directory (Search for key words)

· Copy (**cp**)

o cp file1 test\_dir/file2 (Copy files)

o cp -pr dir1 dir2 (Copy directories)

· Rename or move (**mv**)

o mv file1 test\_dir/file2 (Moves and renames file1 to file2 in test\_dir)

o mv dir1 dir2 (Renames dir1 to dir2)

· Print on standard output (**cat**)

o cat file (Print file content)

o cat file1 file2 (Concatenate and print contents of file1 and file2)

· **less** and **more** command

o more file1 (Read text one screenful at a time. Only forward)

o less file1 (Same as above but also allows backward movement)

· Tail a file (**tail**)

o tail filename (Print last 10 lines of filename)

o tail -n 20 filename (Print last 20 lines of filename)

o tail -f filename (Follow filename and print new lines)

· Print starting lines of a file (**head**)

o head filename (Print 10 starting lines of filename)

o head -n 20 filename (Print 20 starting lines of filename)

· Word Count (**wc**)

o wc -l file\_name (Gives line count)

o cat file\_name |wc -l (Another way to do the same using a pipe)

· **awk**

o cat file |awk ‘{print $2}’ (Prints 2nd field. White space character delimiter)

o cat file |awk ‘{print $1, $2}’ (Prints 1st and 2nd field)

o cat file |awk ‘{print $(NF-1), $NF}’ (Prints last but one field and last field)

o cat file |awk ‘$1 == 1 {print $1, $2}’ (Prints 1st and 2nd field if 1st field equal to 1)

· **sed**

o cat file |sed ‘s/1/9/’ (Substitute 1st occurrence of 1 with 9 in each line of file)

o cat file |sed ‘s/1/9/g’ (Substitute all occurrences of 1 with 9 in each line of file)

o sed -i ‘s/1/9/’ (Edit and substitute in place)

· **vi editor:**

o **vi filename (Opens filename for editing)**

o **Three common modes: normal mode, insert mode and command mode.**

o **vi starts with normal mode. Press ‘i’ or ‘o’ to enter into insert mode to enter data.**

o **To enter into command mode, hit ESC. Some commonly used commands given below.**

o **:w (Write to file)**

o **:wq (Write to file and quit)**

o **:q! (Ignore changes and quit)**

o **G (Uppercase g. Go to last line of file)**

o **gg (Go to first line of file)**

o **dd (Delete current line)**

o **u (Undo)**

o **R (Replace until ESC)**

o **r (Replace one character)**

o **$ (Go to end of line)**

o **0 (Go to start of line)**

· **Check who has vpn. Map remote drives to local pc.**

· **Configure ssh login**

Amit:sort, unique, grep, bash scripting, makefile, expr, time, gdb

Ashwin: find, vpn, drive mapping, gvim, vim, bashrc, tar, zip, chmod, chown

Bharath: mkdir, rmdir, cmd-line shortcuts, pwd, history, cd, ls, alias, man, apropos, cp, mv, cat, less, more, tail, head, wc, awk, sed, ssh login