CS 265

Week 1

Wed Quiz this week

Quiz on every Mon

Lab on Friday

Attendence 10%

Set up account on Tux Unix before lab on Friday

How to log in to Tux

Command:

Ssh name-at-Drexel @tux.cs.drexel.edu

Ex: ssh [bls96@tux.cs.drexel.edu](mailto:bls96@tux.cs.drexel.edu)

Ex:

Variable $i

$ for i in IMG\*

>Do

>djpeg $i | pnmscale 0.25 | cjpeg > `basename $i .jpg`t.jpg

>Done

$

If don’t know what to do? Find the command:

The ***apropos*** command displays a list of all topics in the man pages

If don’t know what command does? Use man \*command\*

Vim editor:

Esc to go to normal mode, i for insert mode for typing. Esc to move the cursor

:q! to exit vim without save changes. Vimtutor to go back to tutor. Move the cursor with hjkl and x to delete the character. :wq to save and exit. Dw to delete the word. D$ to delete to the end of the line.

$ls >> list.out //append the output of ls to the file, single > will overwrite the file

OR echo “abc” >> “$filename”

u for undo cmd, U for undo the whole line. CTRL R to redo the cmd

dd is delete the whole line but in fact, it saved the line to VIM register, use p to paste it.

v then move cursor to shade, y to copy and p to paste.

r(a) to replace letter where the cursor is with letter a.

Week 2

URL <http://cs.drexel.edu/~dln45/index.html>

This URL refer to the server and the server configured the url to refer to the home directory of the user which equals to /home/dln45/public\_html. The index.html refers to the file in that directory.

If you have multiple html, need to specify what html otherwise, it will always go to index.html

Stdin, stdout, stderr on terminal by default. (keyboard, and the output on the terminal)

Process is a instant of a program, not a program. Fork to copy the parent process and create the child process and then exec go to the command that need to be executed (e.g: cat).

Any program that have user connecting to sth, it is always parallel program with 2 processes copying and pasting input output on 2 server and client machines. Ex: ssh split the cmd to 2 process, windows cmd is parent, unix is child and then if we do any cmd in unix, unix is the parent of that cmd, the new cmd is the child process.

Ex: cat file1 file2 > newfile

Shell -> child shell that close the stdout, open newfile as stdout and then run the exec to do the ‘cat’ of newfile.

Redirection: stdout >, stdin <, stderr by 2>. If cat unable to open file1, we need to show the error or save the error to the newfile by redirect stderr.

Pipe: take the stdout of this program to use it as the stdin for another program. Ex: ls ~/public\_html | wc so ls -> pipe -> wc, pipe is not a shell or program.

wc= lines count, word count, character count.

Ctrl D = exit command. (end of transmission EOT)

PS1 promt = the tag that shows on the terminal ex: dln45@tux2.cs ~: . Change PS1 = “\*\*\*:” the terminal will become \*\*\*:

$(cmd) = ‘cmt’ command substitution.

Redirection: > overwrite, >> is append to the output file.

Which echo: it looks in your path to find your command.

Printf = echo but with formatted output like %-15s, %-5x, %-3d…

Week 4

BEGIN vs END of awk

-F’,’ means set field separator as ‘,’. Default is a ‘ ‘

Record separator default is a /n.

{ a[NR] = 0 + $1 } make $1 to be a number.

So by default, records = lines, fields = words in a lines.

Fire up the console by $ python

To run test.py, ./test.py or fire up the python console

>>>import test

>>>main()

* Hello

Shebang !#/usr/bin/python

Def main():

Pirnt “Hello”

If \_\_name\_\_ == “\_\_main\_\_”: //where you want to load the data

Main()