

Part A)

Introduction:

Having good unix skills can make your life in the CSC courses much easier.

Notes about UNIX/LINUX:

- Unlike Windows, UNIX is case-sensitive.
- The path separator is a forward slash (/).
- Tilde (~) is a shortcut for your home directory.
- Tilde followed by a user's name (~eaugusti) is a shortcut for that user's home directory.
- Star/Splat (*) can be used to match multiple files in a directory.
 - `*` matches all the files in the current directory.
 - `*.c` matches all files that end in '.c'
 - `*test*` matches all files that have 'test' somewhere in its name.
- When typing file name in a console, try pressing tab. This is auto-complete. It can help you type commands faster.

Here are some commands that you should learn well:

- ls [folder name] - “list”. shows the files in a folder. If given with a folder name, ls lists the contents of that folder.
- cp <source> <destination> - “copy”. Copy <source> to a new file named <destination>
 - Ex: cp foo.c lab1/bar.c
- mv <source> <destination> - “move”. Move the file <source> to a new file named <destination>. Warning: If you are not careful, you can overwrite files that you don't want to. This is also how you can rename files.
 - Ex: mv foo.c bar.c
- ssh <user>@<host> - Open a shell (terminal) to <host>. Note that there are many ways to do this command. This is just my favorite.
 - Ex: ssh eaugusti@vogon.csc.calpoly.edu
- gcc <C files> - “GNU Compiler Collection” Compile C file(s) into an executable called 'a.out'.
 - Ex: gcc hello.c
- handin <grading account> <assignment> <files> - “Hand In”. This is what you will use to turn in many of your programming assignments at Cal Poly. Note that handin has strict time allowances ie handin will not accept late work. Sometimes you will have to be logged into vogon for handin to work.
 - Ex: handin eriq_grader lab1 file1.c file2.c
- man <command> - “Manual”. Get a description of how to use a command.
- rm <files> - “Remove”. Remove the given files. Be VERY careful. Once you rm something, you DO NOT get it back. There is no recycling bin for 'rm'.
- diff <file1> <file2> - “Difference”. Compare the contents of two files for equality.

Questions:

1. What is the proper command for you to ssh into vogon?
2. How does the '-r' option change the 'cp' command? Hint: use 'man'.
3. Why is it a bad idea to do `rm -Rf` in your home directory?

Exercise:

1. Inside of my (eaugusti) home directory there is a folder called 'pub'. I have given all of you permissions to work in this folder. Inside of this folder I want you to put a file with the following specifications:
 1. The file is called "myusername.txt". Where 'myusername' is YOUR CSC username.
 2. The file should contain some information about yourself.
 1. Your name.
 2. What name you preferred to be called.
 3. What your year/major is.
 4. Favorite text editor/IDE (Exs: vim, eclipse, jGrasp, emacs, etc...)
 5. Your previous programming/unix experience.

If you want an example, take a look at my file (eaugusti.txt) which is in the pub directory.

Part B)

Time to program!

Program:

I want you to make me a small C program that does the following:

1. Prompt the user for two.
2. Take in those two integers.
3. Print the sum, difference, product, and quotient of those numbers.

Example run (3 and 4 are the input):

Hello. Please give me two integers: 3 4

Sum: 7

Difference: -1

Product: 12

Quotient: 0.750000

Question:

1. What is $3 / 4$?
 1. Justify your answer.

Handin)

Email me your answers to the questions for both parts and the source code for your program. No need to attach it, just paste it directly into the email. If I don't respond to your email than you got it right!