Practice with Unix

A. Open the Secure Shell Client program. If you are not already connected, do so. In your home directory, make a new directory called *new-directory*. (Avoid using spaces in any files that you create or transfer to Mason. Remember, Unix is case-sensitive and upper- and lower-case letters are interpreted differently.) (Make sure you are in the Shell, not FTP. To open the Shell from the FTP window, choose **Window** | **New terminal**.)

From the terminal Window menu, choose **File** | **Log Session** and save it as *log.txt* to your Desktop or flash drive.

Open **Pico** and create a new file in new-directory with the name *new-file.txt*.

Having done this, now go through the list of Unix commands in the manual and use as many of them as you can. It's probably best to remove only files and directories that you create for this purpose, and no others.

When you are through, delete any new files and directories you created in this session.

B. Consider the directory structure shown below. The root directory is one level above the university directory. Write the change directory command to go from the first directory to the other in 1.-6., below. For all the change directory commands, specify the *relative path*. [Answers on the next page. There may be more than one correct answer. Try to find the most efficient path.]



- 1. From university, go to the root directory.
- 2. From Chemistry, go to organic.
- 3. From the university directory, go to the History directory.
- 4. From History, go to university.
- 5. From History, go to English.
- 6. From COS, go to History.

C. In what directory will you be after issuing the following commands? (**Enter** is pressed after issuing each command.)

Begin here and proceed in sequence:

at the prompt you type pwd what you see is: prompt > /university/COS/Chemistry/organic

Question 1:

at the prompt you type cd ../.. then at the prompt you type pwd what do you see? prompt > ????

Question 2:

at the prompt you type cd ../CHSS/History then at the prompt you type pwd what do you see? prompt > ????

D. Assume that in each of the directories shown above there is a file that is named with the first three letters of the directory name followed by a *.txt* extension. Example: *his.txt* is in the History directory.

What commands would you issue to accomplish the specified actions?

- 1. Copy the file *chs.txt* with the new name *chss.txt* keeping it in the current directory.
- 2. Delete the file *chs.txt*.
- 3. Rename the file *org.txt* as *org.txt.new*.
- 4. Copy the file *uni.txt* to the COS directory, keeping the same file name.
- 5. Move the file *his.txt* to the English directory.
- 6. Make a new directory named inorganic in the Chemistry directory while you are in the COS directory.
- 7. Delete the history and English directories.
- 8. While you are in the university directory, use Pico to create a new file in the organic directory called *org.txt*.

Answers

B. You could actually make directories in your own Mason account, named as you see them above, with your home directory as the root directory. Then practice the cd commands to see what happens. Remember, Unix is case-sensitive.

1. cd /	or		cd	
2. cd organic				
3. cd CHSS/History	or	cd CHSS	and then	cd History
4. cd/				
5. cd/English				
6. cd/CHSS/History				
C. 1. /university/COS		2. /university/CH	ISS/History	

D. Login to Secure shell. In your home directory make a new directory called "dummy". Then create the directory structure you see on the first page. Try to make the directories without moving down a level to make a lower level directory. [If you have a problem with this, connect to Secure FTP and make your directories there (then learn to do it on the command line).]

Experiment with the commands you find in the manual to carry out the specified actions. You'll know whether or not you were successful. Write down the answer for your successes. With repeated practice you can do this quite rapidly.

1. cp chs.txt chss.txt 3. mv org.txt org.txt.new 5. mv his.txt ../CHSS/English

8. pico COS/Chemistry/organic/org.txt

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