Working with Unix

Name: Chris Eng

Overview

Unix isn't the most obvious or intuitive operating system in the world. The best way to learn it is by actually using it. This homework's activities use many of the most common Unix commands. Points are awarded for the correct response to the tasks. Fill in the signature above, complete the question set and upload this document to the UNIX dropbox.

A. Getting Started

1. Open the Terminal application. Change the default mode in which Terminal works. The instructor will show you how to do this in class.
2. At the prompt, type the command: ssh yourid@solace.rit.edu then press <enter>. This will connect you as a terminal to Solace.
3. When prompted, enter your password followed by <enter>. Unlike a GUI system, nothing is displayed while you type the password. The cursor will not move while you are typing. But if successful, you be logged into your home directory.
4. Enter the command that tells you what your current working directory is:

   What command was used? ___pwd_____

   What was the result?
   _____/home/MAIN/che7955_____

B. Unix Basics

1. Step A.3 above places the user in his/her login or home directory. Display a list of the contents in that directory. What command was used

   _____ls_____

1. In the login directory, create a new directory named mydir. What command was used

_____mkdir mydir_____

1. Change to the directory just created. What command was used

_____cd/ mydir_____

1. What are the contents of this directory? What command was used

_____ls_____

5. Now, change back to the home (login) directory. What command was used

_____.._____

6. Delete the mydir directory. What command was used

_____rmdir mydir_____

C. More Unix—Less Prompting!

1. Create a directory named temp in the home directory. Make temp the current working directory. What command(s) was/were used

_____cd /home —> mkdir temp_____says permission denied so i made it under che7955_____

2. Within temp, create a directory named images. Make images the current working directory. What command(s) was/were used

_____cd /home/MAIN/temp → mkdir images_____

3. Within images, create TWO directories: jpeg and gif. What command(s) was/were used

cd /home/MAIN/temp/images → mkdir jpeg → mkdir gif

---

1. List the contents of the images directory. What command(s) was/were used? What is in the directory

_____ls_____

1. What is the full path to the images directory (starting at root)? What command(s) was/were used to determine this

_____/home/MAIN/temp/image/jpeg (and) /home/MAIN/temp/image/gif_____

6. Now, "jump" to the home directory using only one command. What command was used

_____cd /home/MAIN/che7955_____

7. Create a directory named png in the home directory. What command(s) was/were used

_____mkdir png_____

8. The png directory is in the wrong place. It should be in the images directory, not the home directory. Correct this problem. There are many ways to do this. Write the command(s) used below.

_____mv png /home/MAIN/temp/image
_____

9. Confirm that the images directory now has three (3) directories in it. What command(s) was/were used

_____ls_____

10. Unix is Fun! (highlight one) YES /NO

11. "Jump" back to the home directory. Using a single command, change to the ***png*** directory just created using absolute reference (pathname). What command was used

_____cd /home/MAIN/che7955_____

D. Creating Simple Files

1. Change to home/temp directory. Type the command: nano (or Vi or pico)

There may be an error at this point, indicating that pico "can't recognize the terminal." To fix this, in Terminal:

Terminal (menu) > Preferences… > Advanced (tab) > Declare terminal as… > xterm or vt100.

After changing, close the Terminal window and open a new one (Terminal > New > Basic)

Pico, Vi and Nano are simple txt editors usually available in Unix. Type in some text and then save the file with the name example. (Look at the commands at the bottom of the screen or search the web for help.) What command was used to save the file

_____i used nano then i used ctrl +x and then typed in the name and pressed enter ____

1. Exit pico or nano. The current working directory should still be temp. List the contents of this directory in short form. Then list the directory in long form. What commands were used

_____ls and ls -l_____

14. When the temp directory was listed, there should have been a directory named images and a file named example. In the long listing format, how can a user determine what is a file and what is a directory

_____the colors a dir is blue and a file is gray_____

E. Backup of the Project's Directory Structure

This course requires a very specific directory structure on Solace. The next series of steps will help ensure the directory structure is correct. If things are already set up correctly, the work does not have to be repeated. But make sure everything is set up properly or it can't get graded!

1. In the left (client or local desktop) window, navigate to the empty backup directory.
2. In the right (Solace) window, to navigate to the Sites directory.
3. Select the 140 directory.
4. Drag the 140 directory from the right window to the left window. This will copy all of the files in the 140 directory structure from Solace to the backup folder on the desktop.
5. When the copy is completed, on Solace (the right window), <u>delete</u> the 140 directory and any subfolders below 140. Delete all content of these folders as well.
6. At this point, your Sites directory on Solace should not have a 140 directory.
7. But the backup exists on the client desktop.
8. Now, drag the 140 folder from the desktop into Solace, the Sites directory.

This results in a copy of the 140 folder on the desktop (and any sub-folders) as well as the directory structure you have there to the ***Sites*** directory on Solace. This will guarantee that the structure on the desktop and the structure on Solace are exactly the same.