Week 2 Lab Solutions

Exercise 1

1. *You can open the window by clicking on the button on the bar on top.*

2. *To create a directory, you will need to run* **mkdir***command. The syntax is* **mkdir dir**, *where* **dir** *is the directory you would like to create. So in our case* **mkdir foo**

3. *By "go into" we meant to go into that directory. The syntax is* **cd dir**, *where* **dir** *the directory you would like to go into. So,* **cd foo**

4. *To create an empty file, you need to run* **touch** *command. The syantax is* **touch file**, *where* **file** *is the empty file you would like to create. So,* **touch bar**

5. *This problem was a little tricky. There does not really exist command for renaming files. But, we do have a* **mv** *command, which "moves" files. The syntax is* **mv source dest**, *where* **source** *is the file that you would like to move and* **dest** *is what you would like to name the file after moving it. So,* **move bar baz**

6. *For this problem, you had to do some research, as I did not lecture thoroughly on this command. You would need to use* **chmod** *to change fiile access permissions. You usually want to limit access to certain files which you would not want for everyone to be able to see, run or write-over, like your system files. The syntax is* **chmod mode file** *where file is the directory* **or** *or a file you would like to change the permissions for. There are 2 ways to pass in the arguments for mode, which will set the persmissions. Using letters, for example mode a+x would allow for everyone to write over or in the file. Or we could use numbers, which I think are easier to work with and memorize. The following table lists some of the possibilities.*

Mode	User	Group	Other
000	0	0	0
001	0	0	x
002	0	0	w
003	0	0	wx
004	0	0	r
005	0	0	rx
006	0	0	rw
007	0	0	rwx
100	x	0	0
200	w	0	0
010	0	x	0
733	rwx	wx	wx

So, you notice that there is a pattern here. It does not matter whom we want to give access to, the number will be the same. The trick is just putting it in the right spot. So, for xyz, x is for User, y is for Group and z is for Other.

We asked to make User read, so by looking at tha table, we find that the number we need is **4***, and x stands for users, so we would need to run* **chmod 400 baz***. Then, for Group write, we would notice that we need to put a* **2** *for y, so* **chmod 020 baz***. And, for Other read, it is the same as for User, except for we would need for* **2** *to go for* **z***, so* **chmod 004 baz***.*

But, all of this could have been done in one step! You could actually add the permissions for different categories, so $004+020+400 = 424$*, so we could have ran* **chmod 424 baz**

Exercise 2

For exercise 2 you need to do the following:

1. *touch .Xresources*
2. *vi .Xresoruces*
3. press *i* then type in *XTerm*background: lightblue*
4. press *Esc* then type in *wq* after the colon on the bottom of the page
5. type in *xrdb .Xresources* into the terminal
6. realize that this will not necessarily work in Solaris :)

7. you would change the foreground color by opening *.Xresources* again
8. type in *Shift + A* to append to the end of the line
9. hit *Enter* and type in *XTerm*foreground: blue*
10. repeat step 4