***LOGIN***

They have a number of user accounts. Now, each user account has associated with it a username and a password for identification and authentication.

So when you first start the machine, you're prompted for a username and a password. Now the default patent username, the account that it gives you by default is pi. That's the name of it, so that'll be the username. And the password, default password is raspberry, which you can change, we saw through the raspberry config.

***man*** command. Getting manual pages, or man pages, you know the name of the command but you don't remember how exactly how to use that command. Right, because these commands have lots of options on that you can add to them. And you, maybe you don't remember an option or something like that. So you type man and the name of the command at the prompt. It's a description of the command.  There's a name of the command, its synopsis, its description, gives you all its options, all that.

***FILE SYSTEM***

OS provides you with a file system. A set of directories or folders if you call them that, and files inside those directories. And there's basically a hierarchy of these folders, directories with directories under them.

First thing you want to know is the ***pwd*** command. Pwd tells you what directory you are currently in

Another command that's useful in navigating a file system is ***CD***.CD stands for change directory, and that's basically what it allows you to do. Your terminal is always in a particular directory, which you can determine by typing Pwd. And cd/ allows you to move from one place in the directory hierarchy to another place.

If you just type CD with no option, with no argument, it just brings you back to your default home directory.

If I want to move up one level, you type CD..

If from that place I want to move down a level .Now from home, there are several sub directories underneath home, if I want to go into the pi subdirectory, I can just type CD pi. Notice I didn't say backslash

Now ***ls*** gives you a listing of what is in the current directory. LS command takes several options, and note that with Linux and Unix commands the options are specified with a dash. So in this case I'm going to use a -L option. you get the long form

If you want to create a directory, you use ***Mkdir***. If you want to delete a directory, remove a directory, use ***Rmdir***.

***TEXT EDITOR***

Okay so ***Nano*** is one that you would use from the command line. So if you're at the command line and you want to run this Nano text editor, just type nano at the command line.

You see at the bottom. It has a bunch of different commands there. These programs are basically they have all the operations that you'll expect. File save, open, that type of thing. You can type in your text, delete the text, save it, open it, and stuff like that.

***ACCESSING FILES***

You just want to get a print out of the file. So you can use ***cat***

Now, there's another command called ***head***, which prints the first ten lines of a file. And then there's last or ***tail***, which is the same thing, which prints the last ten lines. You can modify head and tail.If you look at head and tail, they have options to change the number of lines. So, say I want to look at the first 20 lines. You can say head - 20,

***CP*** is copy. It stands for copy, for copying a file. CP takes two arguments, generally. One argument is the name of the original file. And the second argument is the name of the new file. (cp testfile test2)

MV, stands for move. So, to move a file, now you can use that really in one of two ways, at least two ways. One way is to change the name of the file, and the other way is to move it to a new place to a new directory.

***PERMISSION***

 So files have permission. Files have owners first, a file has an owner ,an owner is the person who created the file.

Now the permissions generally come in three categories. Read permission, write permission, and execute permission.

Now, different permissions can be assigned to different users according to the type of user. So, you can have user permissions for the owner. You can have group permissions that are permissions for a group of users and then there are other permissions, which is permissions for everybody else

Doing ls –l   So there's a d for the directory but after that you see nine characters. The first three characters are the user permissions. The next three characters are the group permissions. The next three characters are the other permissions, for everybody else.

In addition to the user account that we're using, pi account, there's another account called the Root Account. Root Account has the highest permission level. So the Root Account has access permission for everything. Key files and directories are only accessible by root.

The way you generally do that is you use a command called ***Sudo***, S-U-D-O.SU is short for Super User, that's a command, super user DO. So you prefix your command with Sudo.

***PROCESS***

You can have a foreground process, one that's running in the foreground that the human is interacting with. And then the rest of the processes are background processes that run in the background.

So in Linux if you want to view a process you use a command called ***ps*** But if I wanna see every process running on the machine I can type ***psa***, so every process gets a unique ID number.

***Kill*** can be used to kill a process, so you can type kill and give its process ID number and kill the process.

***Shutdown*** another command that you should use. So shutdown basically, whenever you have a Linux box, you shouldn't just unplug it all of a sudden. You should shut it down properly. Type shutdown at the command prompt and that shuts it down.