Tutorial 1

AIM : Introduction to the Unix file system and the use of emacs

Key: <CR> -- Enter button

To open a terminal window

Logon to the windows machine then run the sun virtual desktop
This will log you onto the linux virtual machines
Go to the top left click and then select terminal and click and in the terminal window try out the following

Unix commands:-

LOOKING AT THE HOME DIRECTORY:

Try the following commands:

```
ls
ls -a
ls -l
pwd
```

What do each of the above commands do?

CREATING DIRECTORIES:

Make a new SUB-directory called PROGRAMS by typing

```
mkdir PROGRAMS  <CR>
```

Type the following again on the command prompt:

```
ls <CR>
ls –l  <CR>
```

What do each of the above commands do?

CHANGING DIRECTORIES:

Change into the new directory by typing:

```
cd PROGRAMS <CR>
```

Check to make sure you're now in the directory **PROGRAMS** by typing :

```
pwd <CR>
```

REMOVING DIRECTORIES:

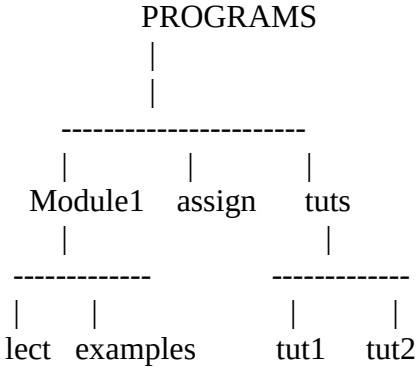
Create a directory called temp, get a directory listing to
make sure it is there, and then delete it
To do this you will need to follow the following sequence of commands:

mkdir temp <CR>
ls <CR> (or ls -al)
rmdir temp <CR>
ls <CR>

Describe what happens once each command is executed.

CREATING DIRECTORY STRUCTURES:

Create the following structure:



HINT:
Use mkdir, cd, pwd and ls.
Try using mkdir -p option to create several directories at once. (This commands creates all the new sub-directories defined by the pathway)

eg; mkdir -p tuts/tut2

This will initially generate the sub-directory tuts if it does not exist else use the existing subdirectory and then inside the subdirectory tuts will generate the subdirectory tut3

To check your structure, change to your directory, and type:

du

The output should look something like(for the above directory structure):

```
2       ./tuts/tut1
2       ./tuts/tut2
6       ./tuts
2       ./assign
2       ./Module1/lect
2       ./Module1/examples
6       ./Module1
16      .
```

(The number on the left refers to the number of files)

The du command Look at the man page for it:

man du

NAVIGATING THE TREE:

Practice changing directories.

- Change back to the home directory.
- Change to Module1/examples under your directory.
- Change back a directory.

Use the command cd use the man page to check out which options
cd <CR> will move you back to your home directory
cd .. <CR> will move you up one level in the directory structure
cd pathway <CR> will move you to the target pathway defined

REMOVING DIRECTORIES:

Make sure you are in the Module1 directory under your directory by typing.

pwd <CR>

if you are not there; navigate your way to the Module1 directory

Remove the examples sub-directory that you created earlier.
Then List the files in the directory
To do this while you are in the Module1 directory you will need to type.

rmdir examples <CR>
ls <CR>

Without changing out of your Module1 directory, remove the directory assign which is one directory lower.

To do this you will need to type:

rmdir ../assign <CR>

COPYING FILES:

Copy the file test.txt into the directory labelled tut2

Pwd <CR>
cd ~/tuts/tut2 <CR> (Or use some other method.)
cp ~/tuts/tut1/test.txt . <CR>
ls <CR>

note the ~ is a shortcut defining the pathway to your home directory

VIEWING FILES:

Try catting the file:

cat test.txt <CR>

Try moreing the file:

more test.txt <CR>

NOTE:
Under more, press <space> for the next page, or q to quit viewing.

RENAMING FILES:

Rename the file to UNIXTutorialOne.text by typing

mv test.txt UNIXTutorialOne.text <CR>
ls <CR>

REMOVING FILES:

Delete the file.

rm UNIXTutorialOne.text <CR>
ls <CR>

CHECKING WHO OWNS A FILE:

Change to the home directory, and do a long listing of ALL files.

cd <CR>
pwd <CR>
ls –al <CR>

MANUAL PAGES:

Have a look at the man pages for each command used in this tutorial.

Also look at these pages:

tail

LOGGING OFF

When you have finished your session on your terminal DO NOT forget to log off.
Do so by clicking the logout button: