# Basic Linux Laboratory

## Bash commands

1. Create the directory module3 in your home directory.
2. Let us now try to create files in your module3 directory by changing into the directory and creating files named file1 through file5 by using the touch command. What kind of expansion does this use?
3. Use the tilde expansion to cd into:
   1. Module2 directory
   2. Moduel3 directory
4. Use Arithmetic expansion to determine the print out following math questions (use the echo command to print out to screen):
   1. 5 plus 2
   2. 8 minus 3
   3. 3 times 3
   4. 7 divided by 3

## Piping and IO

1. Many Linux commands send their output to stdout, so by default their output is sent to the screen. You can however redirect this output to a file.
2. Create the directory module4 and change to this directory.
3. Type in ls –l / > dirlist.txt
4. View the listing by typing cat dirlist.txt
5. Type in ls –l /etc > dirlist.txt
6. Do step 4 again. What happens?
7. Type in ls –l / >> dirlist.txt
8. Do step 4 again. What do you observe?
9. Try doing the piping symbol | by running the command “cat /etc/passwd|more”. What do you observe?

## Setting the Date

1. type the command date and see what happens
2. change the date to November 2nd, 2003 12:57 by typing:
3. date 110212572003
4. type date. What do you see?
5. Return the date back to the current date.
6. Now try typing: date -s "11/20/2003 12:48:00"
7. Type in date and press return. What do you see?
8. Return the date back to the current date using a similar format stated in step 5

## Using Nano (text editor):

We will now use nano (for simpler editing). A bash script is a set of commands placed in a file. Most bash scripts start with a line:

#!/bin/bash

This line is called a shebang.

Now let us make a simple Hello World application:

1. Create a folder named linuxcommands in your home folder and change your directory there.
2. type nano hello.sh and then type in the following lines:

#!/bin/bash

echo -n "What us your name? "

read yourname

echo "Enter your age below"

read yourage

echo "Hi $yourname aged $yourage! How are you doing?"

1. Save and exit
2. type sh ./hello.sh and see the result
3. To look for the meanings of read and echo look for the meanings in the man pages.