INTRODUCTION

But first, you will need to learn a little bit about Linux, the operating system you are using. Please do the following web tutorial:

http://www.ee.surrey.ac.uk/Teaching/Unix/

When you are done, continue to the next section.

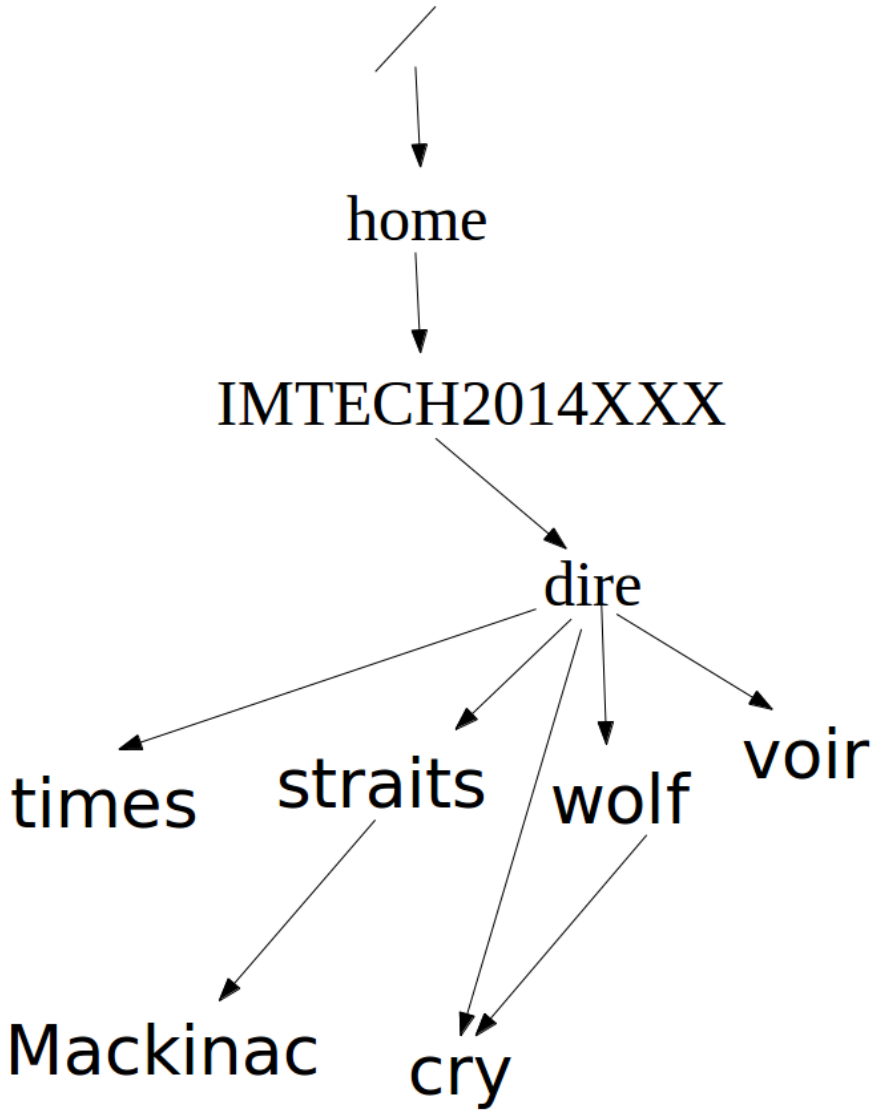
STARTING UP

To do this activity, you will use the following commands, among others:

ls	list the files in the current directory
ls *x*	list the file or directory *x*
cd *x*	change to directory *x*
cd ..	change to the parent directory *x*
cd	change to the home directory *x*
pwd	show the current directory *x*
mkdir *x*	create directory *x*

[READ THE NEXT TWO SECTIONS BEFORE MAKING ANY FILES OR DIRECTORIES]

In your home directory, create a directory named *dire*. Move into the *dire* directory and create the following directory structure:



Your home directory is the one named *as IMTECH2012-ROLL-NO*, not the directory named home. This is because Linux is designed as a multi-user system and there may be more than one home directory (one for each user). The *home* directory holds all the users' home directories.

Please read the rest of this actvity before starting. There's one tricky part that you need to keep in mind

while creating directories.

PLACING FILES IN DIRECTORIES

In each directory, create a file whose name is the first letter of the directory. For example, in the *dire* directory, create a file named *d*. An easy way to create a file is to use the *touch* command. To create a file named *d*, issue the command:

```
touch d
```

A file created in this way exists, but has nothing in it. You could have also created an empty file with vim, as in:

```
vim d
```

and while in *vim*, immediately running the *vim* command `:wq`.

SHARING DIRECTORIES

To share a directory (such as *cry*), one parent directory needs to own it and the other parent needs to link to it. For this activity, have the *wolf* directory own the *cry* directory (that is to say, create the *cry* directory while in the *wolf* directory). Now move up to the *dire* direction and then share or link the *cry* directory with this command:

```
ln -s wolf/cry
```

Make sure you are in the *dire* directory! Now do a listing of the *dire* directory. You should see something like this:

```
cry   d   straits   times   voir   wolf
```

Listing the *cry* directory (`ls cry`), should yield:

```
c
```

VERIFICATION

To see if you did things correctly, run this command while in the *dire* directory:

```
find . -print
```

You should see the following output:

```
.
./d
./cry
./times
./times/t
./voir
./voir/v
./wolf
./wolf/w
./wolf/cry
./wolf/cry/c
./straits
./straits/Mackinac
./straits/Mackinac/M
./straits/s
```

Note that the file *c* in the directory *cry* is listed only once. The order of the listing will depend upon the order you create your directories.

STARTING ALL OVER

If you've made a mistake and you wish to start all over, first move to the home directory and then run the command:

```
rm -r dire
```

The *rm* command with the *-r* option (the *-r* stands for *recursive*) is quite dangerous. It removes the entire directory hierarchy. Remember, any file or directory removed with the *rm* command is unrecoverable!

SUBMISSION

Move into the *dire* directory. Do a directory listing (`ls`); you should see something like

```
cry   d   straits   times   voir   wolf
```

To submit your activity, run the following command from the *dire* directory:

```
submit clab mr dire <xxxx@iiitb.org>
```

where xxxx is your IIITB email address username. Check the password with your instructor.