UNIX and Shell From the Start

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Connecting

`ssh` (secure shell) to one of our servers using:

- PuTTY on windows with login.netsoc.tcd.ie
- using a terminal on unix $ssh name@login.netsoc.tcd.ie

The Basics

If you have never worked with a UNIX shell then these next few slides are the slides to get you started.
We will go through:

- ls
- cd
- rm
- rmdir
- mkdir
- mv
- cp

But first; What are we looking at?

What is this?

```
paddy@cube:~$
```

This is your prompt. It shows your username (paddy), the hostname (cube), and the directory (~: tilde means home).

ls

ls lists the contents of a directory.

```
$ ls -al
```

in this example the -al are the arguments passed to ls.

- -a means all and will list hidden files in a directory
- -l means long listing format and will list more info about each file

output:
`-rw-r----- 1 paddy paddy 3047 Aug 19 22:51 .bashrc`
shows the privileges, number of files in a folder, user etc.

cd

`cd` will change directory.
If we do `ls -a` we can se that there are folders called . and ..
"." means the current directory and ".." means the directory that is above this one. to change into a different directory:

```
$cd .. or $cd <foldername from ls>
```

rm

`rm` removes a file forever.
WARNING: UNIX is not like windows and does not have a recycling bin. If you rm something it will be gone forever.
Usage:

```
$rm [-rvf] <filename>
```

- -r means recursively and will delete all file in a folder and the folder
- -v means verbal and will list files as it deletes
- -f means force

mkdir

Creates one or more new folders

```
$mkdir <filename> <filename2> <etc>
```

mv

Moves or renames files or directorys.
The argument -f can be used to force.
To rename a file or directory:

```
$mv file1 file2
```

```
$mv directory1 directory2
```

Move a file to a directory:

```
$mv file1 Directory
```

If the folder you are moving a file to has a file with the same name it will be deleted first. See WARNING about rm.

cp

Copy a file

```
$cp file1 file2
```

Copy to a different directory:

```
$cp file directory
```

man

`man` is your friend.
man is the manual for commands in UNIX.
If you want to know how to use ls for example then type :

```
$man ls
```

This will show you a list of arguments for ls along with things like the Author and usage etc.
`man` should be your first port of call, yes even before Google.

ls