

A Quick Unix Tutorial

Infrared Lab, Fall 2012

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This tutorial will guide you through the wonderful world of the unix operating system. We will create a directory structure for your first lab and play with some files. Lets get started by first opening up a terminal. To do this right click and select terminal.

And the fun stuff...

First lets figure out where we are:

```
>/home/user% pwd
```

You should be in your home directory (*/home/yourusername%*). If you are not, type the command *cd* (which stands for change directory). *cd* will always take you back to the home directory when an argument is not given.

Lets make our first directory. This directory (folder) will house all of your OIR lab materials, including lab reports, IDL code, etc...

```
>/home/user% mkdir ay122
```

Dive into this directory with the change directory command.

```
>/home/user% cd ay122
```

Now create a directory for your first lab. Within that directory create three directories for your idl code, lab report, and data. Once you have done that, go back to your ay122 directory. Note that using the using the command “*cd ..*” goes up one directory from your present directory (known as the parent directory).

Lets now copy some files over.

```
>/home/user% cp /home/zakiali/ay122testfiles/* ~/ay122/
```

The above command copies all the files in ay122testfiles into your ay122 folder. *** is the wildcard symbol. It takes on the value of all the files in a directory (in this case at least; more on it later!). The *~* is shorthand for your home directory.

Look at the contents of each of the files and put them where they belong. For example, looking at the contents of Readme,

```
>/home/user/ay122% cat Readme  
This directory contains lab material for lab 1.
```

This Readme belongs in the lab1 directory. Move it there. The command *cat* prints out the contents of files. It is more convenient than using emacs or vim for small files.

```
>/home/user/ay122% mv Readme ~/ay122/lab1/
```

Readme files are usually always all caps. Change the name of the Readme to README. To rename files, the same command as above is used.

```
>/home/user/ay122% mv lab1/Readme lab1/README
```

Figure out where the rest of the README files go and move them there. README files become very important and you are highly encouraged to use them. Astronomers don't always remember what the contents of directories are, especially after not having looked inside them in a long time. What other files were copied over from ay122tesfiles directory? What are its contents?

One last task! Copy over the files "examples.pro" and "plots.pro" from */home/parriaga/Oirlab* into your ay122 directory.

You should now have a working directory tree for OIR lab! Once you get comfortable using the basic commands above take a look at

<http://ugastro.berkeley.edu/computing/software/unix.html>

for more in depth tutorials and references.