Tutorial 1 Session 2 - Summary

Tutorial:
Introduction to Linux/Unix and the HPC environment at NYU

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### Session 2

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### Some useful references

There are some good tutorials for the Linux and the shell at [LinuxCommand.org](http://LinuxCommand.org). And a good quick reference at [FreeEngineer](http://FreeEngineer).
Summary

The computer is like a nut. **The shell is the outside layer and it provides an interface for interacting with the programs and commands** - the meat of the operating system.

Through the command line, the shell provides a **language for expressing what it is you want to do**. By **joining simple programs together** in a few simple ways, you can perform an astonishing range of tasks. Moreover, **these tasks can be scripted**.

The shell is full of **shortcuts** - tab-completion, aliases, history, variables, wildcards. As you build up a repertoire of commands and shortcuts you will find that by working in the shell you can be far more productive that a GUI can allow.

But you don’t need to be an advanced user to use the shell - just a few basic commands will get you a long way. Some key commands to remember are:

- **man** - show the manual for something
- **less** - display something one page at a time
- **which** - find where a command comes from

Exercise

Now that you have met the shell, if you have an account on NYU HPC, **setup your workstation for SSH tunneling**. This will be useful for Tutorial 2.

Once you have an SSH tunnel you might want to skip back to **Moving files to and from the HPC clusters**

Next: Session 3: Preparing and running jobs