

Exercise 0

Log onto your desktop computer. What is your home directory (`pwd`)? What shell are you using (`echo $0`)? When you edit files here, are you using the network when you save to disk? Let's practice creating a file, looking at it, and deleting it.

```
ssh -Y login@hostname.nmsu.edu
pwd
echo "here is some text" > sampleFile.txt
ls -lrth
cat sampleFile.txt
rm sampleFile.txt
ls -lrth
```

Echo doesn't let you edit files easily. Emacs does. Let's create a file using emacs.

```
emacs myfile.txt
```

In the emacs window, type a few sentences of text indicating your favorite dessert and movie. Then C-x C-s (control character + letter x, then control character + letter s) to save. Then C-x C-c to exit. Look at the contents of your text file:

```
cat myfile.txt
```

See how much space is available on your partitions, using the `df` command (try `df -k` and `df -h`)

```
df -h ~ [how much data is free on the partition where your home directory lives?]
du -sh ~ [how much space is used by everything within your home directory?]
exit
```

If you are on a department machine Do you have a user directory on the "small" and "large" partitions? Log onto the main astronomy server again. What is your home directory? When you edit files here, how are you using the network?

```
ssh -y login@astronomy.nmsu.edu
pwd
ls
exit
```

- Can you see the disks on your computer using `df` (see above)?
- Can you change directories to the disks on your computer (`cd /home/partitionname`)? When you edit files here, are you using the network?
- Log onto hyades, praesepe, or virgo, see how much disk space they have using `df`.
- How many [virtual] processors do they have?

```
grep processor /proc/cpuinfo |wc -l
```

- How much memory total is on Virgo? (hint: such information is stored in the `/proc/meminfo` file)