



### Exercise 7.1 Kernel Modules

1. List all currently loaded kernel modules on your system.
2. Load a currently unloaded module on your system.  
If you are running a distribution kernel, this is easy to find; you can simply look in the `/lib/modules/<kernel-version>/kernel/drivers/net` directory and grab one. (Distribution kernels come with drivers for every device, filesystem, network protocol etc. that a system might need.) However, if you are running a custom kernel you may not have many unloaded modules compiled.
3. Re-list all loaded kernel modules and see if your module was indeed loaded.
4. Remove the loaded module from your system.
5. Re-list again and see if your module was properly removed.

### Solution 7.1

1. `$ lsmod`
2. In the following, substitute whatever module name you used for `3c59x`. Either of these methods work but, of course, the second is easier.  

```
$ sudo insmod /lib/modules/$(uname -r)/kernel/drivers/net/3c59x.ko  
$ sudo /sbin/modprobe 3c59x
```
3. `$ lsmod | grep 3c59x`
4. Once again, either method works.  

```
$ sudo rmmod 3c59x  
$ sudo modprobe -r 3c59x
```
5. `$ lsmod | grep 3c59x`