Lab 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/3c59.x
   $ 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`