



Exercise 26.1: 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 26.1

1. `$ lsmod`

2. In the following, substitute whatever module name you used for `8139too`. Either of these methods work but, of course, the second is easier.

```
$ sudo insmod /lib/modules/$(uname -r)/kernel/drivers/net/ethernet/realtek/8139too.ko
$ sudo /sbin/modprobe 8139too
```

3. `$ lsmod | grep 8139too`

4. Once again, either method works.

```
$ sudo rmmod 8139too
$ sudo modprobe -r 8139too
```

5. `$ lsmod | grep 8139too`