Exercise 4.2 Adding a New Startup Service with systemd

As mentioned in the previous exercise, you can still use the **SysVinit** startup script procedure with **systemd** but this is deprecated.

The analogous procedure is to create (as root) a file directly under `/etc/systemd/system` or somewhere else in that directory tree; distributions have some varying tastes on this. For example a very minimal file named `/etc/systemd/system/fake2.service`:

```
[Unit]
Description=fake2
After=network.target

[Service]
ExecStart=/bin/sh -c '/bin/echo I am starting the fake2 service ; /bin/sleep 30'
ExecStop=/bin/echo I am stopping the fake2 service

[Install]
WantedBy=multi-user.target
```

Now there are many things that can go in this **unit** file. The `After=network.target` means the service should start only after the network does, while the `WantedBy=multi-user.target` means it should start when we reach multiple-user mode. This is equivalent to runlevels 2 and 3 in **SysVinit**. Note `graphical.target` would correlate with runlevel 5.

Now all we have to do to start, stop and check the service status are to issue the commands:

```
$ sudo systemctl start fake2.service
$ sudo systemctl status fake2.service
$ sudo systemctl stop fake2.service
```

If you are fiddling with the unit file while doing this you'll need to reload things with:

```
$ sudo systemctl daemon-reload
```

as the system will warn you.

To keep an eye directly on the output you can do:

```
$ sudo tail -f /var/log/messages
```

(use `/var/log/syslog` on **Ubuntu**) either in background or in another windows while the service is running.

To set things up so the service turns on or off on system boot:

```
$ sudo systemctl enable fake2.service
$ sudo systemctl disable fake2.service
```

Once again, you really need to reboot to make sure it has taken effect.