

## Homework 1

```
root@OSC:/home/oscreader/Desktop/os/homework1# ls
birthday_module.c  Makefile
root@OSC:/home/oscreader/Desktop/os/homework1# make &> /dev/null
root@OSC:/home/oscreader/Desktop/os/homework1# ls
birthday_module.c  birthday_module.mod.c  birthday_module.o  modules.order
birthday_module.ko  birthday_module.mod.o  Makefile  Module.symvers
root@OSC:/home/oscreader/Desktop/os/homework1# sudo insmod birthday_module.ko
root@OSC:/home/oscreader/Desktop/os/homework1# lsmod | grep birthday
birthday_module      12438  0
root@OSC:/home/oscreader/Desktop/os/homework1# dmesg
[19234.884455] Loading Module
[19234.884458] Adding: Madison (3/16/1751)
[19234.884459] Adding: Washington (2/22/1732)
[19234.884459] Adding: Adams (10/30/1735)
[19234.884460] Adding: Jefferson (4/13/1743)
root@OSC:/home/oscreader/Desktop/os/homework1# sudo rmmod birthday_module
root@OSC:/home/oscreader/Desktop/os/homework1# dmesg
[19234.884455] Loading Module
[19234.884458] Adding: Madison (3/16/1751)
[19234.884459] Adding: Washington (2/22/1732)
[19234.884459] Adding: Adams (10/30/1735)
[19234.884460] Adding: Jefferson (4/13/1743)
[19249.036578] Removing Module
[19249.036580] Removing: Madison (3/16/1751)
[19249.036581] Removing: Washington (2/22/1732)
[19249.036582] Removing: Adams (10/30/1735)
[19249.036583] Removing: Jefferson (4/13/1743)
root@OSC:/home/oscreader/Desktop/os/homework1# █
```

The image shows the commands to:

- Make the module while redirecting stdout and stderr output
- Install the kernel module
- View the kernel messages
- Remove the module
- View the kernel messages again