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I pledge my honor that I have abided by the Stevens Honor System.

ztalarick

Lab-3-linux-kernel-modules-ztalarick

### **Hello Module:**

I added 2 printk statements that print a Hello message to the name specified when loaded and a Goodbye message to the same name to the kernel log. There is a default name if no name is specified.

### **Qmod Module:**

I implemented a queue that can be interacted with userspace programs. One will add a specified message to the end of the queue and the other will remove the first message and send it to the user. If the queue is empty when someone tries to remove a message then an error will happen and it will return -1. I also added a mutex that will ensure the device is only accessed by one process or thread at a time. The queue is implemented using a struct and struct pointers. It is allocated on the heap using kmalloc and kcalloc. When the module is unloaded each message still on the queue is removed and kfree'd, the the queue itself is kfree'd.