Steps for executing character driver along with user space program:

Steps:

1. **Compilation of driver**: for compilation we need to follow below steps
   1. Create Makefile (check “Makefile” from attach document)
   2. To compile use **make** command (once you run this cmd you will see **.ko** files.
2. **Insert/load module**: To insert the module use below command
   1. **sudo insmod my\_char\_driver.ko**
   2. Once insert the module we can check module successfully load or not using **lsmod** or **cat proc/devices** command
3. **Kernel logs:** after inserting the module we can see kernel logs using below commands
   1. **dmesg**
   2. Now you can see kernel log / printk statement
4. **Compilation of user space code:** To compile the code use
   1. **gcc user\_space\_code.c** command
   2. After compilation it will create executable file name as **a.out**
5. **Run user space program:** After creating a executable file, run the program using below command
   1. **sudo ./a.out**
   2. During execution parallelly we can check kernel log using **dmesg** command
   3. After execution we can remove/unload module
6. **Remove/Unload module:** To remove the module use below command
   1. **sudo rmmod my\_char\_driver**
   2. After removing the module, we can check kernel log using **dmesg** command.
   3. we can check module successfully unload or not using **lsmod** command.