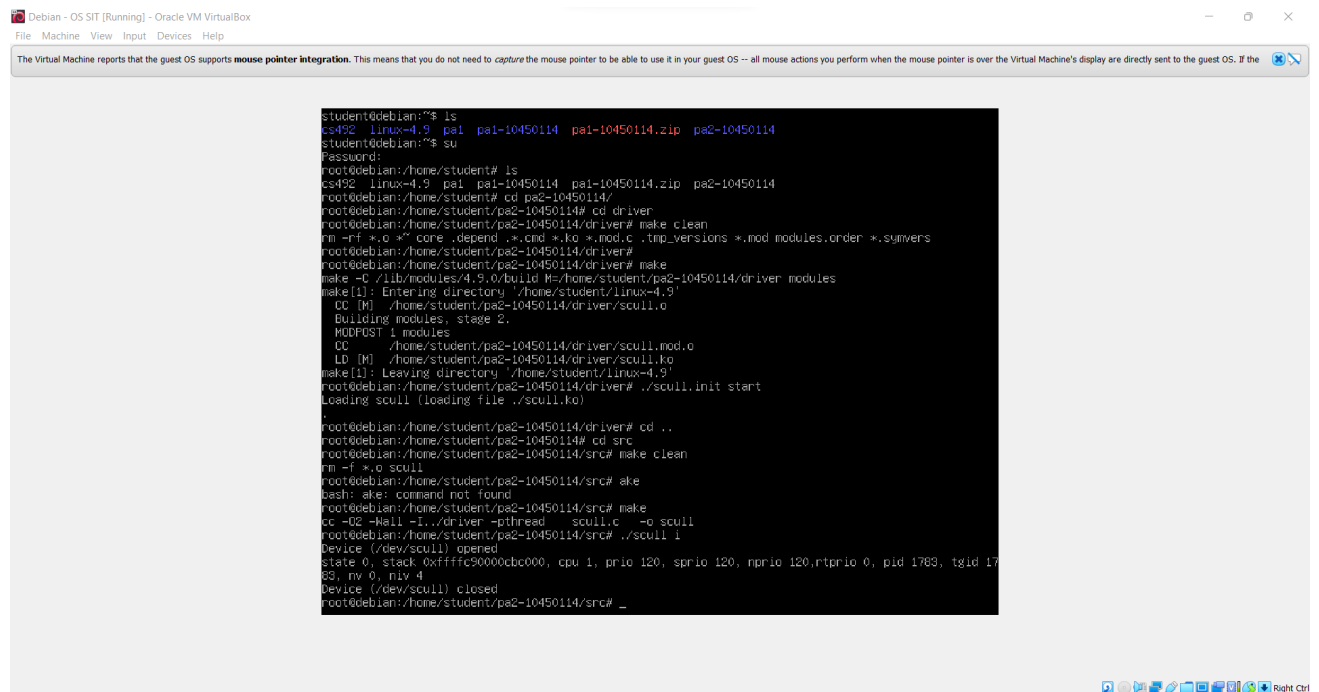


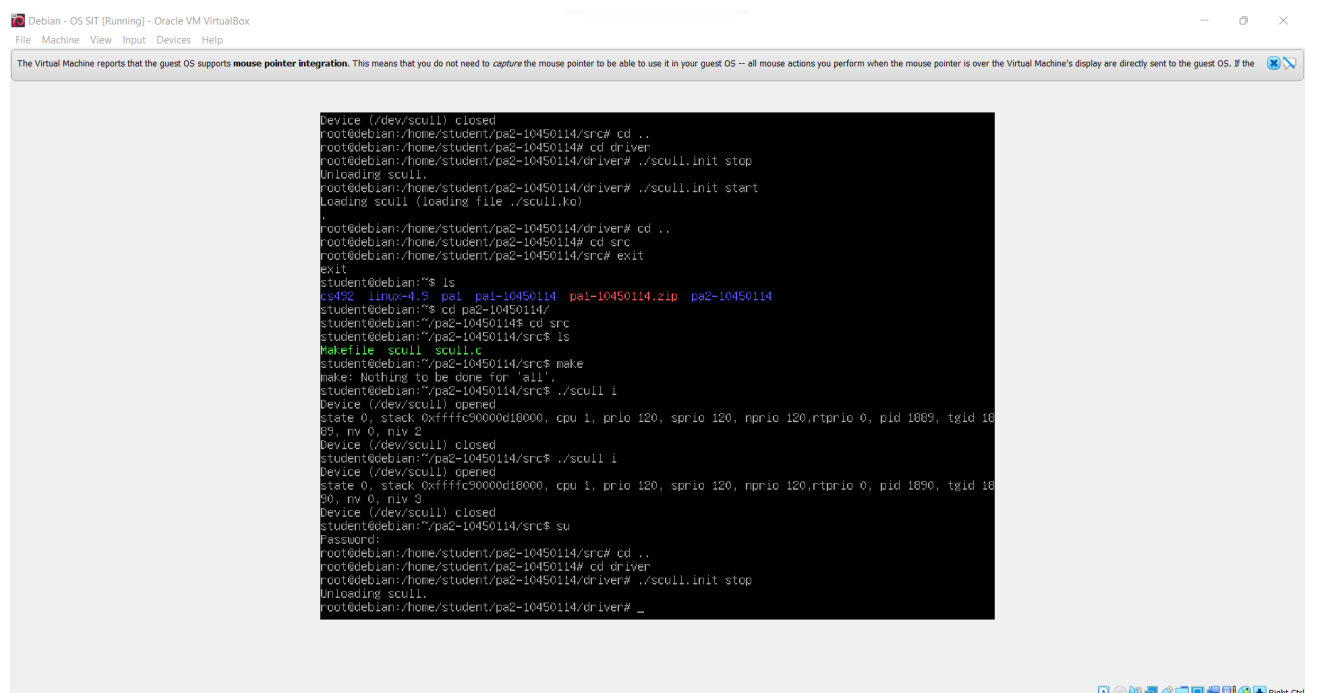
Matthew Vayfeld

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



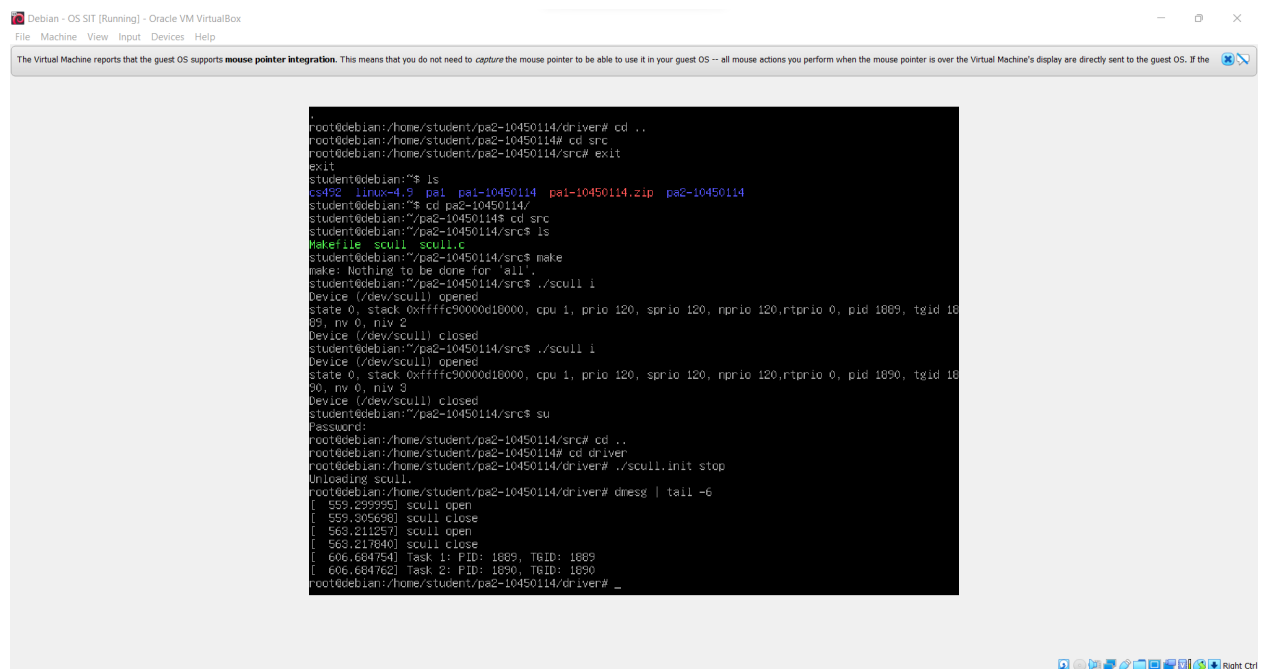
```
student@debian:~$ ls
cs432 linux-4.9 pa1 pa1-10450114 pa1-10450114.zip pa2-10450114
student@debian:~$ su
Password:
root@debian:/home/student# ls
cs432 linux-4.9 pa1 pa1-10450114 pa1-10450114.zip pa2-10450114
root@debian:/home/student# cd pa2-10450114/
root@debian:/home/student/pa2-10450114# cd driver
root@debian:/home/student/pa2-10450114/driver# make clean
rm -rf *.o *.so *.core *.depend *.o *.ko *.mod.c *.tmp_versions *.mod *.modules.order *.symvers
root@debian:/home/student/pa2-10450114/driver#
root@debian:/home/student/pa2-10450114/driver# make
make -C /lib/modules/4.9.0/build M=/home/student/pa2-10450114/driver modules
make[1]: Entering directory '/home/student/linux-4.9'
  CC [M] /home/student/pa2-10450114/driver/scull.o
  Building modules, stage 2.
  MODPOST 1 modules
  CC      /home/student/pa2-10450114/driver/scull.mod.o
  LD [M] /home/student/pa2-10450114/driver/scull.ko
make[1]: Leaving directory '/home/student/linux-4.9'
root@debian:/home/student/pa2-10450114/driver# ./scull.init start
Loading scull (loading file ./scull.ko)
root@debian:/home/student/pa2-10450114/driver# cd ..
root@debian:/home/student/pa2-10450114# cd src
root@debian:/home/student/pa2-10450114/src# make clean
rm -rf *.o scull
root@debian:/home/student/pa2-10450114/src# ake
bash: ake: command not found
root@debian:/home/student/pa2-10450114/src# make
cc -O2 -Wall -I../driver -pthread -scull.c -o scull
root@debian:/home/student/pa2-10450114/src# ./scull i
Device (/dev/scull) opened
state 0, stack 0xffffc90000c0000, cpu 1, prio 120, sprio 120, nprio 120,rtprio 0, pid 1763, tgid 17
63, mv 0, nrv 4
Device (/dev/scull) closed
root@debian:/home/student/pa2-10450114/src# _
```

Screenshot e

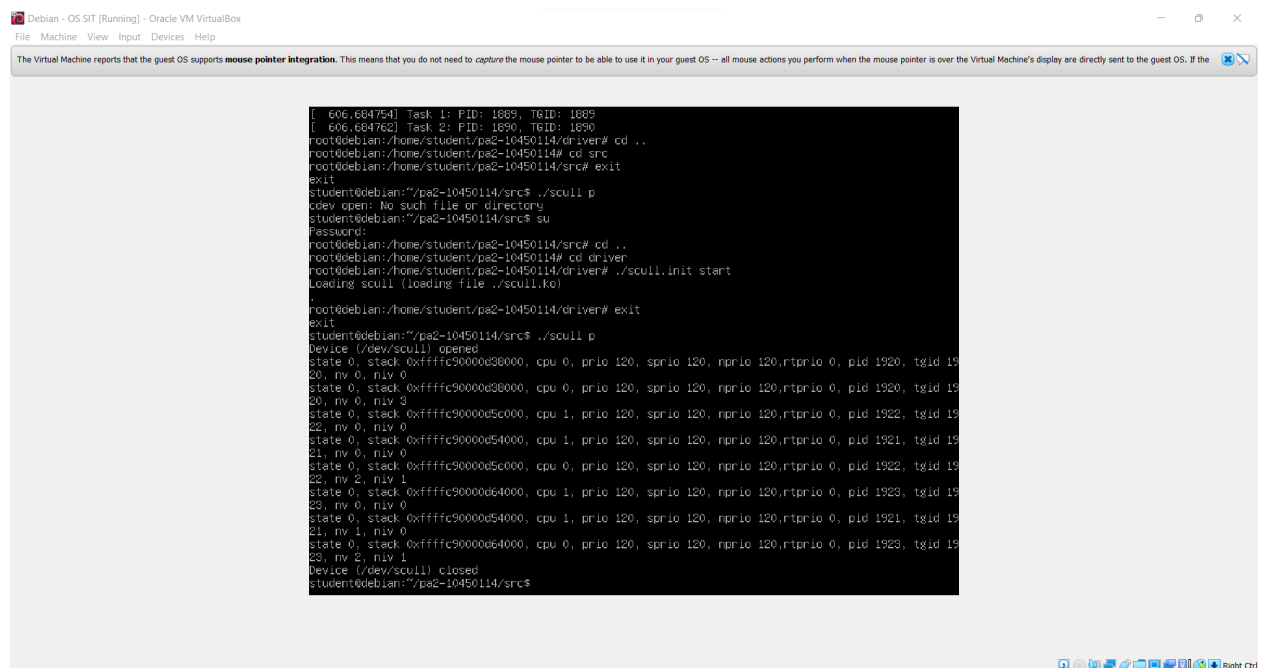


```
Device (/dev/scull) closed
root@debian:/home/student/pa2-10450114/src# cd ..
root@debian:/home/student/pa2-10450114# cd driver
root@debian:/home/student/pa2-10450114/driver# ./scull.init stop
Unloading scull.
root@debian:/home/student/pa2-10450114/driver# ./scull.init start
Loading scull (loading file ./scull.ko)
root@debian:/home/student/pa2-10450114/driver# cd ..
root@debian:/home/student/pa2-10450114# cd src
root@debian:/home/student/pa2-10450114/src# exit
exit
student@debian:~$ ls
cs432 linux-4.9 pa1 pa1-10450114 pa1-10450114.zip pa2-10450114
student@debian:~$ cd pa2-10450114/
student@debian:~/pa2-10450114# cd src
student@debian:~/pa2-10450114/src$ ls
Makefile scull scull.c
student@debian:~/pa2-10450114/src$ make
make: Nothing to be done for 'all'.
student@debian:~/pa2-10450114/src$ ./scull i
Device (/dev/scull) opened
state 0, stack 0xffffc90000d0000, cpu 1, prio 120, sprio 120, nprio 120,rtprio 0, pid 1869, tgid 18
69, mv 0, nrv 2
Device (/dev/scull) closed
student@debian:~/pa2-10450114/src$ ./scull i
Device (/dev/scull) opened
state 0, stack 0xffffc90000d0000, cpu 1, prio 120, sprio 120, nprio 120,rtprio 0, pid 1890, tgid 18
90, mv 0, nrv 3
Device (/dev/scull) closed
student@debian:~/pa2-10450114/src$ su
Password:
root@debian:/home/student/pa2-10450114/src# cd ..
root@debian:/home/student/pa2-10450114# cd driver
root@debian:/home/student/pa2-10450114/driver# ./scull.init stop
Unloading scull.
root@debian:/home/student/pa2-10450114/driver# _
```

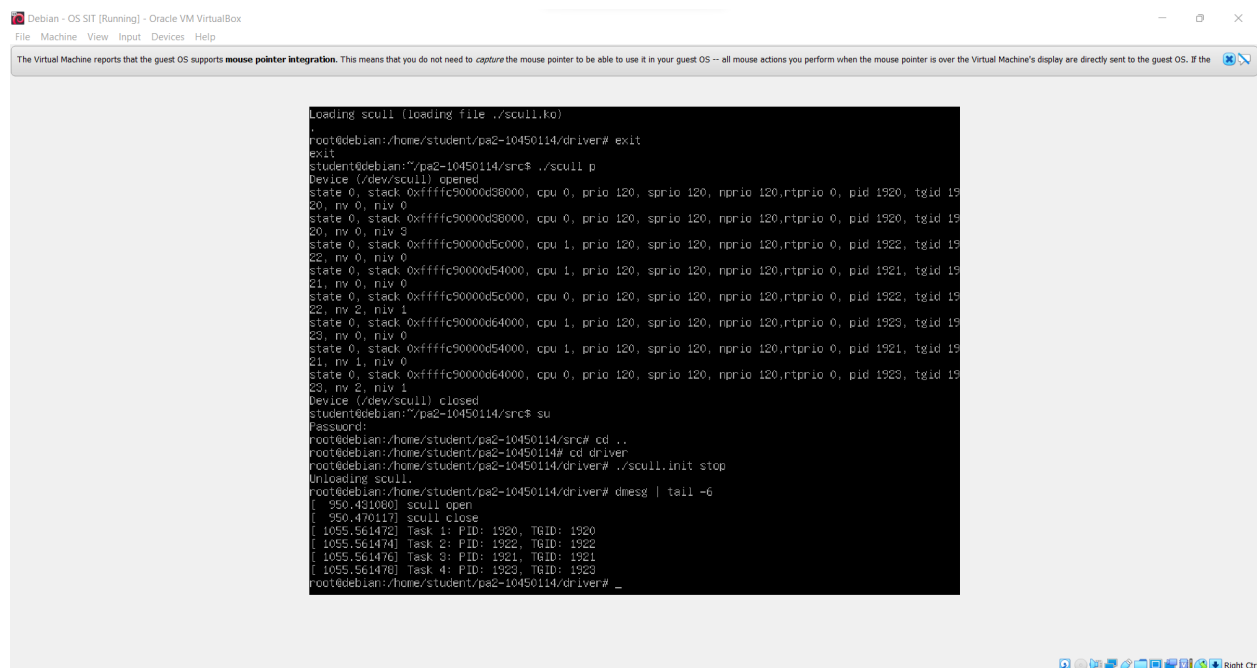
Screenshot f1



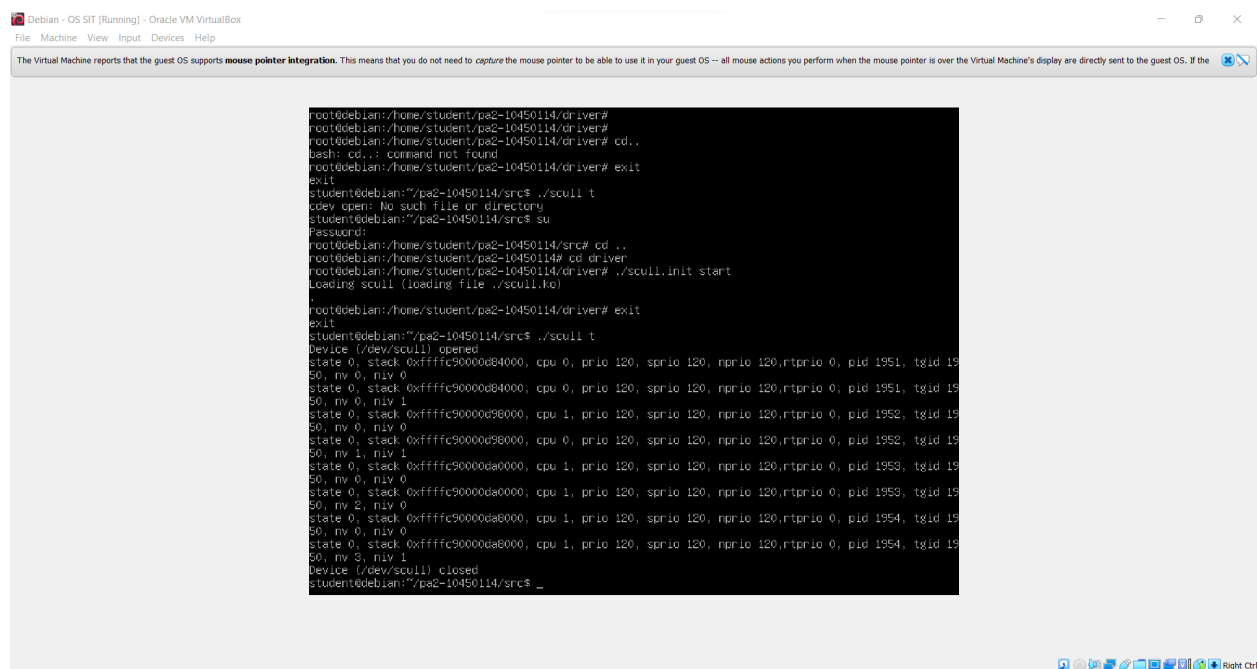
Screenshot f2



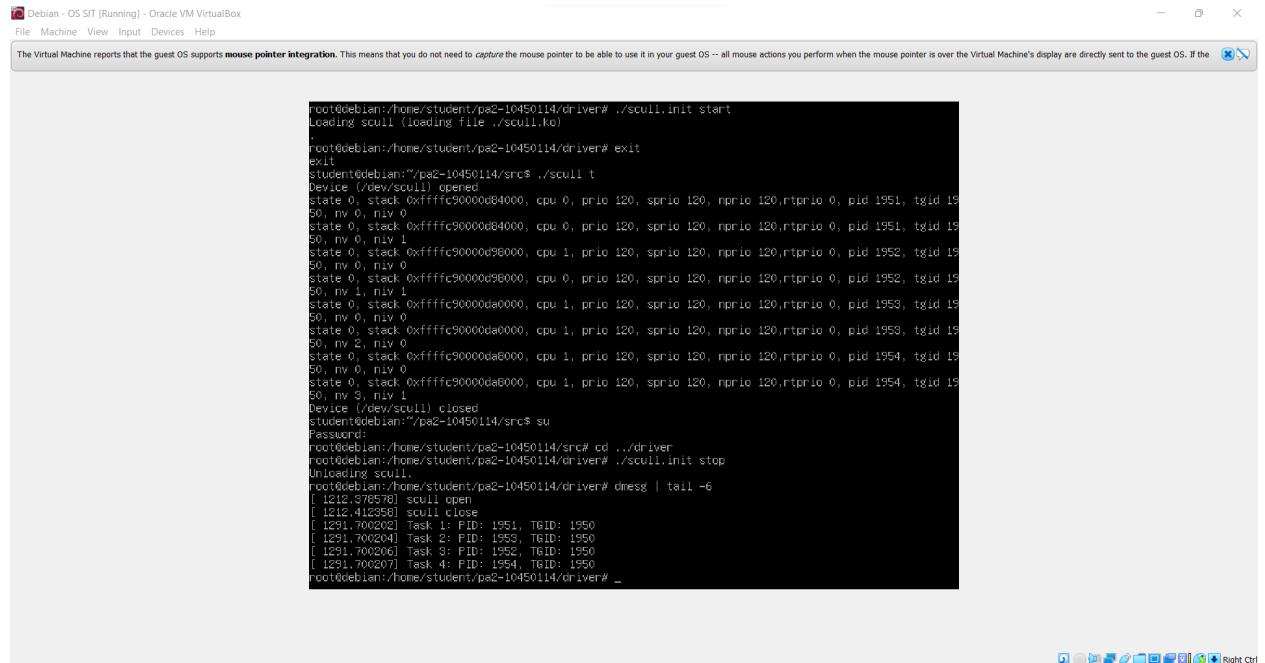
Screenshot g-1-1



Screenshot g-1-2



Screenshot g-2-1



Screenshot g-2-2