Zhang Jiayi 120090796 how did you design your program:

For program1, it is basically depends on tutorial2 slide and the reference website in it. But in program1, I add extra condition in order to run the tests. I assume the code in the slide had taught most of the things. All I need to do is to change some order and consider a little bit about the different conditions in the test files.

For program2, I fail to run it. When I insmod program2.ko, it always shows that "unknown symbol in module", I am not sure what is the reasons, maybe it is because of the failure of exporting, though I am pretty sure that I succeeded in exporting those functions. Still I assume there is not much wrong in my code. It took me a long time to finish coding it. It is a pity that I cannot run it. I was inspired by the tut2 a lot.

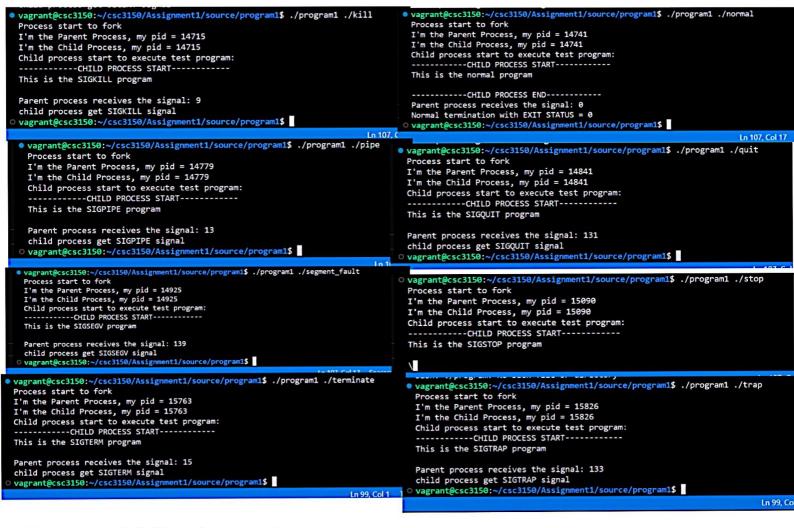
How to set up your development environment, including how to compile kernel:

I set it up with my classmate. I think this is the hardest part of this assignment. We encounter a lot of problems.

We have to search for the internet and read the slides over and over again. (It magically work out after I cry out loud.

Screenshot of your program output: program 1

```
/csc3150/Assignment1/source/program1$ ./program1 ./abox
     I'm the Parent Process, my pid = 11812
I'm the Child Process, my pid = 11812
Child process start to execute test program:
--------CHILD PROCESS START------
                                                                                                         I'm the Parent Process, my pid = 11890
I'm the Child Process, my pid = 11890
Child process start to execute test program:
-------CHILD PROCESS START------
     This is the SIGBUS program
                                                                                                          This is the SIGABRT program
     Parent process receives the signal: 135
                                                                                                          Parent process receives the signal: 134
     child process get SIGBUS signal
                                                                                                          child process get SIGABRT signal
     vagrant@csc3150:~/csc3150/Assign
                                                                                                       o vagrant@csc3150:~/csc3150/Assignment1/source/program1$
                                                                                                      vagrant@csc3150:~/csc3150/Assignment1/source/program1$ ./program1 ./floating
      csc3150:/home/vagrant/csc3150/Assignment1/source/program1# ./program1 ./alarm
                                                                                                      This is the SIGFPE program
Parent process receives the signal: 14
child process get SIGALRM signal
root@csc3150:/home/vagrant/csc3150/Assignment1/source/program1#
                                                                                                      child process get SIGFPE signal
vagrant@csc3150:~/csc3150/Assignment1/source/program1$
                                                                                                         vagrant@csc3150:~/csc3150/Assignment1/source/program1$ ./program1 ./interrupt
      ant@csc3150:~/csc3150/Assignment1/source/program1$ ./program1 ./illegal instr
  This is the SIGINT program
  Parent process receives the signal: 132 child process get SIGILL signal vagrant@csc3150:~/csc3150/Assignment1/s
                                                                                                        Parent process receives the signal: 2 child process get SIGINT signal
```



Program2 fail to insmod

What did you learn from the tasks:

I have to admit this assignment force me to learn a lot of things. For example, the instrusion of linux system.

And the basic concept of operating system. (How does os fork a parents and a child process, the connection between process and thread...) Beside that, I have deeper understanding of virtual machine and environment setting up...