Implementation detail and difficulties

First download the kernel, and then I started to modify the source according to the ppt that TA provided. First add the three new system call: show, multiply and min to those source file that needed to be changed. Set the show to 337, multiply to 338 and min to 339, finally set the NR_syscalls to 340. Then add these system calls to the .h file. Then implement the .c file for the three system calls in kernel folder.

From the testing part, I learn how to use the system calls that I have add in a C program, by using syscall(), with the system call number and the needed parameters. The result is provided as pictures below.

system call show:

```
[ 1411.844641] eth0: no IPv6 routers present
[ 1667.972155] b02901113, Cheng Han Hsu
johnny@johnny-VirtualBox:~/Desktop/OSPJ1$ 
```

system call multiply and min:

```
johnny@johnny-VirtualBox:~/Desktop/OSPJ1$ ./a.out
Please input two numbers :45
77
Multiply answer is 3465
Min answer is 45
```

The only problem I encountered was that I assigned too few memory space for my virtual machine, thus when I wanted to build the kernel I modified, I didn't have enough space for that, thus I had to do the whole process again.