

Question2:

First we got all the necessary files as well as linux version 5.9.1 onto our Vm- ware virtual machines. Then we used some commands like `cp /boot/config-$(uname -r) .config` and `make menuconfig` to get our modules and files ready. Then, we wrote commands for installing the modules.

Then we added some system calls into our linux system. To do this, I first reached the directory in which my linux was installed and created a directory called `sh_task_info` (since we need the system call with this name) and created a `.c` file with the same name. Then, I made a `makefile` and added a command to it. And then, after finding the `makefile`, I added a command to the functioning of our system call.

Then , we needed to add the system call to the system calls table which I did by going into a folder named `x86` and adding the call in that table. Then, we had to compile the kernel again which I did by writing some commands.

Now, in our `test.c` file, the user will pass filename and pid value. The program will show us which value has been returned by the system call. Then , in order to show the pid as well as call details, we will use the `dmesg` code to print all the calls as well as save all the details in a file.