

OS ASSIGNMENT 3

README FOR Q3:

Name: Harsh Parimal Popat

Roll No. : 2021048

We have to print the data that is in the task_struct and get the process id of the parent and the child. For this we first compile the module by making the make file and making the modules. In the module i have first created a pidStruct and taskstruct pointer which is used to call in the main function while running the module. I have used a variable pidInt which can be used to give the process id details we want while we insert the module. I have created a init_module(void) in which I have used a function find_get_pid to get the pid if it is inputted while installing the module if it is given then it will print the PID, its user id , process group id and the command path it is run in . else it will print only the given pid while insmod. there is an checking for the pid of the current task to be run also.

Now to compile the module we just run make and it made the module accordingly in the Makefile given. Then we have to put the module in the system with the command insmod and the module complied .ko file. Then we check if the module is installed or not by lsmod. sudo insmod hello-1.ko - this will get the details of all the process running in the system sudo insmod hello-1.ko pidInt=5659 will get the details of the 5659 process running only we will get the data from doing: sudo dmesg or we can just run sudo dmesg -t | tail -7. We can remove the module by rmmod and the module name.