Assignment 1

Description of the code:

In my directory taskinfo, I have 3 files:
- taskinf.c
- taskin.h
- Makefile

TASKINF.C:
I have taken a pointer to the linked list task_struct. It iterates through the linked list, and has an if condition checking if pid matches the pid given as an argument in the system call. If it does, it prints the process name, pid number , process state, priority, RT priority, Static Priority and Normal priority. It is also creating a file through sys_open() system call and writes in it through write() system call.

TASKIN.H:
This is a header file where system call is declared.

MAKEFILE:
This is for compiling of taskinf.c.

Inputs user should give:

- User should make a C file where in the system call is called. The number for sh_task_info() is 317.
- User can use the tester file provide. He should compile the file and run it by ./a.out pid_number filename. My program will automatically create file if the file is not created.
- dmesg to print the output.

Expected Output:

- User should first get an output of System call executed correctly, if correct pid_number and filename is entered. Filename, if is a directory, would output an error.
- User will get System call not executed if either pid entered is less than 0 or file name is actually the name of a directory.

Error Values:

My code handles two main kind of errors.

- **Incorrect Pid Number entered:** This checks if PID number is greater than 32768 and less than 0. If it is so, it would throw an error with error number corresponding to it.
- **Incorrect File Name:** This error would take place if incorrect filename is entered. This could be if the name of directory is entered or incorrect type of text file is given.