

# Test Description

## Script 1

testf1out.txt 8.51 KB

EditWeb IDELockReplaceDelete

1  
2  
3  
4 Name: lab@mod.c ELEC 377 Demo Module  
5  
6 Purpose:  
7 Demo Lab showing the use of Linux Modules  
8 Return How long OS has been running in a human readable string  
9 through a /proc file  
10  
11 Author: Thomas R. Dean  
12  
13  
14 Function: my\_read:  
15 A function that will be called by the kernel when  
16 the user reads the /proc file. In this case, the number  
17 of characters is always less than the size of the buffer,  
18 so we use a simplified version of the /proc api. We write  
19 the time of boot as a unix time stamp into the buffer.  
20  
21 Parameters:  
22 page the buffer provided by the kernel  
23 start point to pointer to indicate which buffer was used  
24 fpos the position in the file  
25 blen the length of page (ignored)  
26 eof pointer to indicate end of file  
27 data module private data pointer (ignored)  
28  
29 Return value:  
30 int The number of bytes written into the buffer  
31  
32  
33 Name: init\_module

Returns:  
None

lab@user.c ELEC377 Demo User Module

This program reads the results produced by our /proc module and formats it for the user.

Author: Thomas R. Dean

Funtion main

Purpose: This function reads the file /proc/lab@  
The contents of the file is the unix time stamp giving the time when the system was booted. It uses the ctime library to convert the string to a readable form and prints an appropriate message.

Parameters:  
none

Returns int

File: shell.c

Pupose: This program implements a simple shell program. It does not start processes at this point in time. However, it will change directory and list the contents of the current directory.

As seen in the outputs, the test file starts by the bars of equal signs, one is the initial bar and the other is the one followed by each extracted file. All the comments in the .c or .h files are extracted into the test file; these comments are will organized. Between each file, a bar of equal signs is also added as expected.

## Script 2

test2out.txt 206 Bytes

1 Main files:  
2 labs/lab0/lab0user.c 1 1  
3 labs/lab1/shell.c 10 8  
4 labs/lab3/consumer.c 0 2  
5 labs/lab3/meminit.c 3 0  
6 labs/lab3/producer.c 0 2  
7 Modules files:  
8 labs/lab0/lab0mod.c : 77,80,108  
9 labs/lab2/lab2.c : 47,96

test2noout.txt 72 Bytes

1 Main files:  
2 labs/lab1/shell.c 10 8  
3 Modules files:  
4 module file not found

As seen in the pictures above, when the argument number is great than 0, the file path of both main files and module files are be printed, for the main files, the number of printf and fprintf are shown after the file path. Also, for module files, the lines number of printk is printed after the file as expected.

For the one with no output of module files, main file is printed as expected, but the module file shows the error message that no file is found.