

Threads and pipes

You should compile with `-lpthread`, such as

`gcc -o threadthread.c -lpthread`

[thread.c](#) Investigate the code and give command `"threadmesaj"`. Try without any `mesaj`, just as `"thread"`, What `"NULL"` corresponds for.

[thread1.c](#) Executes several times, and check the change in `thread_id`, if there is not, why?

[thread2.c](#) Study the code and describe the functionality.

[thread3.c](#) Study the code and describe the functionality.

[thread4.c](#) Study the code and describe the functionality. Try to write the without **`struct`**

[pipe.c](#) Describe how `pipe()` system call works.

[pipe1.c](#) [read_pipe.c](#) Compile both programs and execute as `"pipe1 10"`, executes several times by changing the seed each time

[signal.c](#) Study the code and describe the functionality.

[signal1.c](#) Study the code and describe the functionality. Break with `Ctrl+Z`, you will get

`[1]+ Stopped signal1`

then kill the stopped process with `"kill %1"`.

Investigate the following [program1](#) and [program2](#) for creating 4 threads (These codes should be compiled in SUNLab). Each thread will increment the value of a global variable by one for 1000 times. Study the followings;

- After each iteration the thread sleeps for a short while.
- Compare the programs.
- Test your program several times.
- Do you always get a correct result?