

National University of Computer & Emerging Sciences
Department of Computer

Science

Operating Systems Lab

Lab # 9

Instructions:

1. Make a word document with the convention "SECTION_ROLLNO _LAB-NO". In addition, paste all of your work done at the LINUX prompt.
2. You have to submit a Word File.
3. Plagiarism is strictly prohibited; negative marks would be given to students who cheat.

Tasks

1. Write a program that contains 3 threads. Each thread increment the global variable and then adds that value to the result which is another global variable. Initialize result and other variable with 0. Output the final value of result and the other global variable.
2. Write a program that creates threads based on the input given by user. Each thread should execute function print () and display its thread ID. The output should be like:

Hello I am thread 1 my ID is 123

Hello I am thread 2 my ID is 234....

The main thread should wait for the child threads to terminate and then call exit.

Use pthread_self()

pthread_t ID= pthread_self (void);

Returns the unique thread ID of the calling thread

3. Write a program that create 4 threads with proper create, join, exit system calls and all threads are doing different jobs
4. Write a program that create an array of 4 threads using for loop and return thread id and process id from each thread and comments on the IDs of threads and process.