[2017 Network System Programming Homework 6]

Upload:

1. Please compress your homework into zip or tar archive.
2. Naming rules: “StudentID_SP_HW6.zip”. For example: M053040086_SP_HW6.zip
3. Upload your homework to National Sun Yat-sen Cyber University.
4. Deadline: 2017/12/04 (Mon.) 23:59.

Note:

1. Please use C language in this homework and run your program on Ubuntu 16.04.
2. Please provide Makefile to compile your homework; otherwise, you will get ZERO.
3. Do not copy homework of others. If it happened, you will get ZERO whether you are either the owner of the homework or the copycat.
4. You have to deeply understand what your program do because TA will ask you something about your program during the demo.
5. If you have any question, please send email to sp_ta@net.nsysu.edu.tw or come to EC5018, but TA does not help to debug.
6. If you do not submit your assignment on time, you will not hand in the delayed homework and get ZERO as well. If you have trouble, please advise in advance by email. Moreover, time and place for demo will be announced later.

Homework6: Interprocess synchronization (referring Module 11 Slide 33, and Module 10).

Refer Module 11 slide 21 stack.c example which demonstrate multiple threads access a shared stack. Currently, “threads” are changed to “processes”. Consider to use share memory scheme to share this stack among a couple of processes. You are asked to design a synchronization scheme to make these processes push/pop this shared stack. Rewrite the stack.c to demonstrate a solution of interprocess synchronization.