

[2018 Network System Programming Homework 7]

Upload:

1. Please compress your homework into **zip** or **tar** archive.
2. Naming rules: "StudentID_SP_HW7.zip".
For example: M053040086_SP_HW7.zip
3. Upload your homework to National Sun Yat-sen Cyber University.
4. **Deadline: 2018/11/25 (Sun.) 23:59.**

Note:

1. Please use **C language** in this homework and run your program on **Ubuntu 18.04**.
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. 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**.
5. 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 late.

Question:

Rewrite the programs in **Listing 48-2** and **Listing 48-3** (**Section 48.4**) as a threaded application, with the two threads passing data to each other via a global buffer, and using POSIX semaphores for synchronization.