# **Assignment 2(PThread Programming)**

Due: 2014-11-17 23:59

# **Assignment:**

#### P1:

Please refer to P1 of Assignment 1.

## **Description:**

You will be allocated one of these problems above according to your student id.

[Your Problem ID]=([Last Three Digits of Student ID+1] Mod 4)+1

Please note your problem id has changed, do not implement the same problem in Assignment

**1.**Use PThread to simulate your problem and deal with the synchronization problems you encountered. Your test case should include all situations referred to in your problem.

#### P2:

Please implement Median filter algorithm in PThread.

Median filter:http://en.wikipedia.org/wiki/Median\_filter

### **Description:**

Everyone should complete P2 using PThread, use optimization technology in your code to improve efficiency as much as you can.

## **NOTICE:**

- 1. Marking Criterion: We will evaluate your program from several aspects.
  - Optimize Technology(40%)
  - Execution Efficiency(30%)
  - Correctness(20%)
  - Code Style(10%)
- 2. Write a brief report to claify your results and thought.
- 3. Send your final version to TA before due date. You should archive your source code and report with name StudentID\_Name\_Assinment2.rar(or any archive file types).
- 4. If you have any questions, please feel free to contact TA.
- 5. PThread Tutorials: https://computing.llnl.gov/tutorials/pthreads/

# Warning:

No cheating, please refer to 《上海交通大学学生学业诚信守则》, it is your responsibility to take the consequences if you violate the rule.

#### Extras:

For next assignment,we will have several groups. You can choose one or two friends as your partners. (There should be less than three persons in one group.) You can choose a leader of your team and the leader will send me your team members list before the due date. If you are not in any group after the due, I will randomly allocate for you. You will know your group information on our website before next assignment.