

CS447 Networks and Data Communications

June 23 Lecture Note

0. Announcements:

(1) Project #1

- Compiling the server and the client source code files using Visual Studio C++ 2022 (with demonstration)
- Submission due: 11:00 a.m., June 26th
- Suggested resource (especially for the server process)

<https://ykkim.gitbook.io/ec/other-programming/socket-programming/window-socket-programming>

(2) Quiz #1 solutions have been posted to the course home.

(3) Homework #2 due

- Submission due: 11:00 a.m., June 23

(4) Quiz #2 (scheduled on 6/23)

- Quiz #2 is scheduled at the end of the CS447 lecture on Tuesday (6/23)
- Ten questions will be asked in Quiz #2 (6/23). At least five questions from the sample questions will appear in Quiz #2. At most five new questions (those that do not appear in this list can be asked in Quiz #2).

(5) Quiz #3 (scheduled on 6/30)

(6) Homework #3 (due at 11:00 a.m., June 30)

- Homework #3 questions will be emailed to each of you by the noon on June 24th

1. IP (Internet Protocol – a. k. a., “layer 3 in the OSI 7-layer reference model)

- IP subnets and subnet masks
- Exercises

2. Flow-Control for packet-switching networks

- General concept of flow-control
- Stop-and-wait flow-control
 - Its concept
 - Stop-and-wait Performance analysis
 - Exercises
- Sliding-window flow-control
 - Its concept
 - Sliding-window Performance analysis
 - Exercises

3. TCP Flow-control

- Slow-start & linear growth
 - Exercises

4. Quiz #2 (1:20 ~ 1:40)

- A timekeeper wanted