1. Ask students to come forward and pick up:
   - Attendance card
   - Quiz #5 question list
   - Quiz #5 grades

2. Announcements:
   - Quiz #4 has been graded (should be returned at the end)
   - Quiz #5 is scheduled this Thursday (2/14)
   - A time-keeper wanted (to remind ‘15 minutes before the end of today)

3. Project #1: using TCP/IP

   /* create a new TCP/IP socket ----------------------------------------- */
   /* AF_INET = "IP" and SOCK_STREAM = "TCP" */
   server_socket = socket(AF_INET, SOCK_STREAM, 0);
   (as in server.cpp)

4. Error control

   - Exercises (the one distributed on February 5th): EXERCISE #2 and #3

   **EXERCISE #2:**
   Suppose that **asynchronous serial data transmission is clocked by two clocks** (one at the sender and the other at the receiver) that each has a drift of 2.5 minutes in one year. How long a sequence of bits can be sent before possible clock could cause a problem? Assume that a bit waveform will be good if it is sampled within 52% from the center. Assume that the bit samples are taken at the middle of the clock period. **Also** assume that at the beginning of the start bit the clock and incoming bits are in phase. Show all your work.

   **EXERCISE #3:**
   What is the probability of **non-detectable** error for even parity error detection using the following assumptions (give the formula - you do not have to complete calculation)?
   - Bit error rate = 10^-4
   - Frame size (excluding the start/stop bits) = 8 bits
   - Start and stop bits will never cause bit errors.
   - Transmission rate = 56.7 Kbps.

   - CRC (Cyclic Redundancy Code) error detection (with an exercise)

5. Flow-Control

   - Sliding window flow control
   - TCP slow-start dynamic window-size control algorithm
6. Quiz #5 review (10 to 15 minutes)