Problem Set 2 (due February 13, 2012).
[100 points]

Important Notes:
1. Can be done in teams of two students.
2. Late submissions will result in a 10% penalty per day (e.g., 2.5 days late result in 25% penalty).
3. You can use the Internet to get some help, but you should use your own words, examples, and code when answering the questions.

Traffic Measurements (80 points)
1. Setup your router with OpenWrt, and the corresponding development SDK. Try out the HelloWorld program and install it on the router.
2. Using the libpcap library examples, develop a program that monitors the traffic and maintains a small table with real time statistics of uplink and downlink traffic: UDP, TCP, DNS, HTTP (to/from port 80), and number of live TCP/UDP sessions.
3. Your program (running on the router) should periodically report (every 30 seconds) the last period statistics to a udp/tcp server program running on login.ccs.neu.edu (or another server in the College). The statistics should be logged to a file.
4. Prepare a 10 minutes presentation to be given in class on 2/13.
5. Optional: add any interesting statistics you can think of (be creative).

Final Project Proposal (20 points)
Submit a one-page proposal for your project. Provide supporting documentation such as components/devices/libraries your will need/use.