SPRING 2004
HOME WORK ASSIGNMENT#1

CS 4/55231 INTERNET ENGINEERING
Department of Computer Science, Kent State University
Due Date: ___ _____ (5x100=500 points)

1. Search the RFCs and explain briefly (in one paragraph each) the purpose of the following protocols: (a) RTP (b) NTP, (c) RTCP, (d) RSVP, (e) PPP, (f) RTSP and (g) BGP. List the most relevant RFC numbers those describe them.

2. Assume one megabytes of file must be transferred across a network. Ignoring headers and delays caused by waiting for access, how long would it take to send the files across an Ethernet? Across a LocalTalk network? Across a Fast Ethernet?

3. Explain why Ethernet has a minimum and a maximum frame size. Explain what will happen if two stations are assigned the same hardware address?

4. Suppose a packet is sent across a bridged LAN to a nonexistent address. How far will bridges forward the packet?

5. Show that a switch with four ports simulates six bridges. Extend the figure to have five ports. Now write an equation that gives the number of simulated bridges needed as a function of the number of ports.