

Computer Networks: Home work project 3

Assigned: Thursday, Mar 17

Due: Tuesday, Mar 29

(LATE SUBMISSIONS WILL NOT BE ACCEPTED)

1. **libpcap packet capture library**

Libpcap is a general purpose packet capture library. tcpdump is built using libpcap. You can learn more about libpcap using the manual pages 'man pcap'. There is also an online tutorial available at <http://www.tcpdump.org/pcap.htm>. For this question, you will

- 1 Develop a tcp program which will, open a connection from host A to some web server (port 80) (e.g. www.yahoo.com, news.bbc.co.uk) host B, write a 1 byte packet and close the connection.
- 2 Develop a program using libpcap to capture the packets transmitted for this tcp transaction. Describe the details of each ipv4 packet that is part of this conversation.

You would need super-user privileges to run this project; you can get this access by using `sudo <your program>`. The password is your AFS password.