# CSCI 367 - Computer Networks I

# Assignment 01

# Packet Capture Analysis Using Wireshark

* Start a command-line session
* Execute ipconfig and note your computer’s IP address
* Start Wireshark and select Capture…Options…Loopback Adapter
* Set Wireshark’s capture filter to icmp
* Ping the localhost IP address 127.0.0.1 from the command line
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Ping the IP address of your computer from the command line
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Change the packet capture network adapter. Select Capture…Options and select your computer’s network adapter.
* Ping the IP address of your computer from the command line
  + Are there any ICMP packets captured?
* Execute ipconfig and note your network’s gateway router IP address
* Ping the IP address of your network’s gateway router from the command line
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Execute tracert with the network’s gateway router’s IP address as the tracert argument
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Ping the IP address of google.com from the command line
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Execute tracert with google.com as the tracert argument
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Set Wireshark’s capture filter to http
* Start a web browser
* In the web browser’s address bar, enter google.com
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)
* Start Wireshark and select Capture…Options…Loopback Adapter
* Set Wireshark’s capture filter to icmpv6
* Ping the IPv6 localhost IP address ::1 from the command line
* Record and save the TCP/IP packet exchanges (File…Export Specified Packets)

# Submission

Upload each of your packet captures to Canvas. If you have never used Canvas, log into your canvas account, proceed to CSCI247, and you should see an option for items that are open for submission.