

## Lab 2 - Wireshark I

- This is an individual assignment, and worth 20 points.
- The due date and time is 4:00 Thur, September 14 (Sec 01) / 7:00 Thur, September 14 (Sec 76).
- Naming convention is as follows: homework, hyphen, last name, first initial, and extension (e.g., Lab1-Outcome-Img.docx). If you do not follow the convention, I will deduct 1.
- Use “gen-googlemaps.pcap” (NOT gen-googleopen.pcap) for the assignment.

1. What are the IP and MAC addresses of the router (gateway) to which the client forwards a packet?
  - IP address: 192.168.0.1
  - Mac address: 00:13:46:cc:a3:ea
  
2. What IP addresses are available to support the inquiries to maps.google.com? Which one was picked by the client?
  - Available IP addresses: 74.125.19.147  
74.125.19.104  
74.125.19.105  
74.125.19.99  
74.125.19.106  
74.125.19.103
  - Selected IP address: 74.125.19.147
  
3. In the first TCP packet, what is the MAC address of the destination?  
00:13:46:cc:a3:ea
  
4. What are the absoulte sequence and acknowledgement numbers of the ACK packet observed during the first three-way handshaking (use packet # 7)?
  - Absoulte sequence number: 4228839243
  - Absoulte acknowledgement number: 3100896923
  
5. What ports are used for the TCP communication (use packet #5)? List the ports that the client (source) and the server (dest) used.
  - The port # (client used): 3012
  - The port # (server used): 80