CNT 5008 – Fall 2022 - Homework 3

Due: November 28, 2022

Instructions:
- Submit your answers in the form of a single document file
- Remember that the homework is **individual** work.
- This homework is worth 15 points with 4 bonus points available for problem 2

Problem 1 (3 points) – Set up WireShark
- Install the Wireshark network analysis software, with the version appropriate for your personal computer. Demonstrate using screenshot.

Problem 2 (12 points):
Re-run all the problems from Homework 2. For all the problems, create a filter in Wireshark which captures just the packets that are involved in the particular interaction. Demonstrate the captured packets. Describe the experience / problems you had.

Note: if you were using a local SMTP server, it might not be difficult to capture packets associated with the local interface on Windows.

Problem 3 (2 points each, for a maximum of 4 pts):
Each of these problems are worth an extra 2 pts bonus. Please mark them as 3-1 and 3-2.
Choose a network or link layer protocol we studied in class. Try to capture packets that implement that protocol (at least 3 packets). Interpret what is going on (i.e. what do you think that the given packet is accomplishing.