# **Week 1 Exercises**

Submit as **pdf** on D2L

## Problem 1:

Install Python on your system.

Install Wireshark. Watch a stream on youtube and capture the dataflow with wireshark. Submit a pdf / jpg / png of the Wireshark traffic when you start watching. (You need only 10 - 30 packets.)

#### Problem 2:

What part of the TCP/IP stack needs to be updated if you use a new transmission media (e.g. 6 GHz band) for LANs.

## Problem 3:

A line has a signal-to-noise ratio of 2000 and a bandwidth of 8 Khz. What is the maximum data rate supported on this link.

## Problem 4:

A device is sending out data at the rate of 5000 bps. How long does it take to send a file of one million characters (of 8 bits each)?