Assignment 6

Read the documents of the NS3 simulator using the ns-3 <u>Tutorial</u> and https://www.nsnam.org/docs/release/3.37/models/ns-3-model-library.pdf.

- 1. Run the C++ file /ns-allinone-3.37/ns-3.37/examples/tutorial/seventh.cc and output the size of the congestion window graph over time using Gnuplot.
- 1. Study the impact of channel properties on the performance of TCP protocol by changing the channel properties such as link delay and channel loss.
- 2. Familiarize the NS3 simulator by setting up the following dumbbell topology and measure the throughput, average delay, and packet loss ratio in the TCP communication between node 1 and node 4 for 100 seconds. And, output the size of the congestion window graph over the time using Gnuplot.

