OVERVIEW

In this lab, we will study the stop and wait protocol in the transport layer to build a reliable link between the sender and receiver. You will notice that the simulation in the transport layer is somehow different from those we have done, due to the fact that we need to consider the time dimension in the transport layer simulation. In particular, you will complete four tasks:

1. Task 1 gives an overview about the simulation of the stop and wait protocol in the transport layer. You will measure the throughput of the stop and wait protocol by simulation.
2. In task 2, you will create the packets in the transport layer for later use.
3. In task 3, you will create the function for simulating the receiver function in the stop and wait protocol. In particular, you will handle the duplicated packets in the receiver to recover the original message.
4. In task 4, you will create the function for simulating the sender function where you will manage the transmit packets list, handle the ACK packet, and deal with the timeout case.