

**Assignment 2: Implement three data link layer protocols, Stop and Wait, Go Back N Sliding Window and Selective Repeat Sliding Window.**

**Submission due: 2<sup>nd</sup> week of February 2018**

Transmitter (Tx), and Receiver (Rx) and Channel all are independent processes. There may be multiple Transmitter and Receiver processes, but only one Channel process. To use the Channel the Receiver and Transmitter processes use the Send Queue and Receive Queue. Transmitter processes send data frames to the Send Queue and get acknowledgements from the Receive Queue. Similarly, Receiver process gets data frames from the Receive Queue and send Acknowledgement frames to the Send Queue. Both these queues are implemented as IPC (Inter Process Communication) mechanism message Queue. The channel process introduces random delay and/or bit error while transferring frames from Send Queue to the Receive Queue. Define your own frame format or you may use IEEE 802.3 Ethernet frame format.

