FAST- National University of Computer and Emerging Sciences, Karachi.

FAST School of Computing
Assignment # 3, Fall 2021.
CS3001- Computer Networks

ASSIGNMENT-III (RELIABLE DATA TRANSFER)

Submission Guidelines:

➢ **This is a group assignment. Each group can be of two members only.**
➢ **This is a programming assignment and the submission will be based on 4-5 minutes demo followed by a short viva on Thursday, 16th December, 2021.**
➢ **You have to submit the code and screenshot of the working demo on Google classroom.**
➢ **The student ID, names and section must be mentioned clearly during the demo.**
➢ **Each group should mark their attendance during the demo.**
➢ **Plagiarism in any form will result in straight "F"**

Assignment # 3 (100 points)

Develop the reliable data transfer protocol (rdt 3.0). For the sake of simplicity consider only uni-directional data transfer, but the control information will flow on both directions. You may use the finite state machine (FSM) of the rdt 3.0 to understand all the states, events and actions.

Note:
You need to implement stop and wait protocol where only a single packet is in-flight. Further the size and count of packets to be transferred should be configurable. You can also assume a fix timeout period.