Stop and Wait protocol :-

→ This is a noiseless channel protocol.

→ Stop & wait protocol is a Flow control protocol

→ It provides unidirectional data transmission with flow control facilities but without error control facilities.

→ In this the Receiving & Transmitting of data will not be at the same time.

→ The process is once one frame is sent the sender will wait for acknaoledgement before transmitting the next one.

Primitives :-

Sender Side :-

Rule-1 : Send one data packet at a time

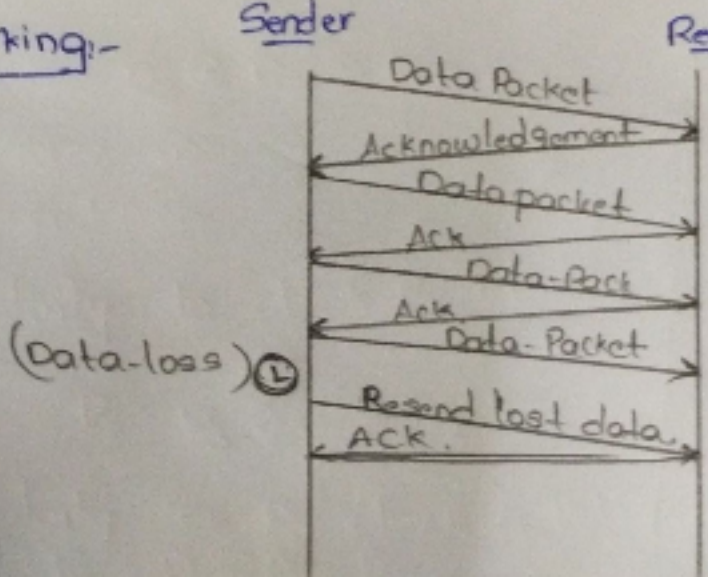
Rule-2 : Send next one only after receiving the Ack for the previous frame

Receiver side :

Rule 1 : Receive & consume data packet

Rule 2 : After consuming packet Ack needs to be sent (Flow Control).

Working :-



Advantages:-

- Simplicity

Disadvantages :-

- Time consuming for larger data packets.
- Sender waits long time for ack. to be received
- Receiver waits long time for data to be received.
- Delay in the ack might be wrongly considered as ack for some other packet.