



Sliding Window Protocol by C

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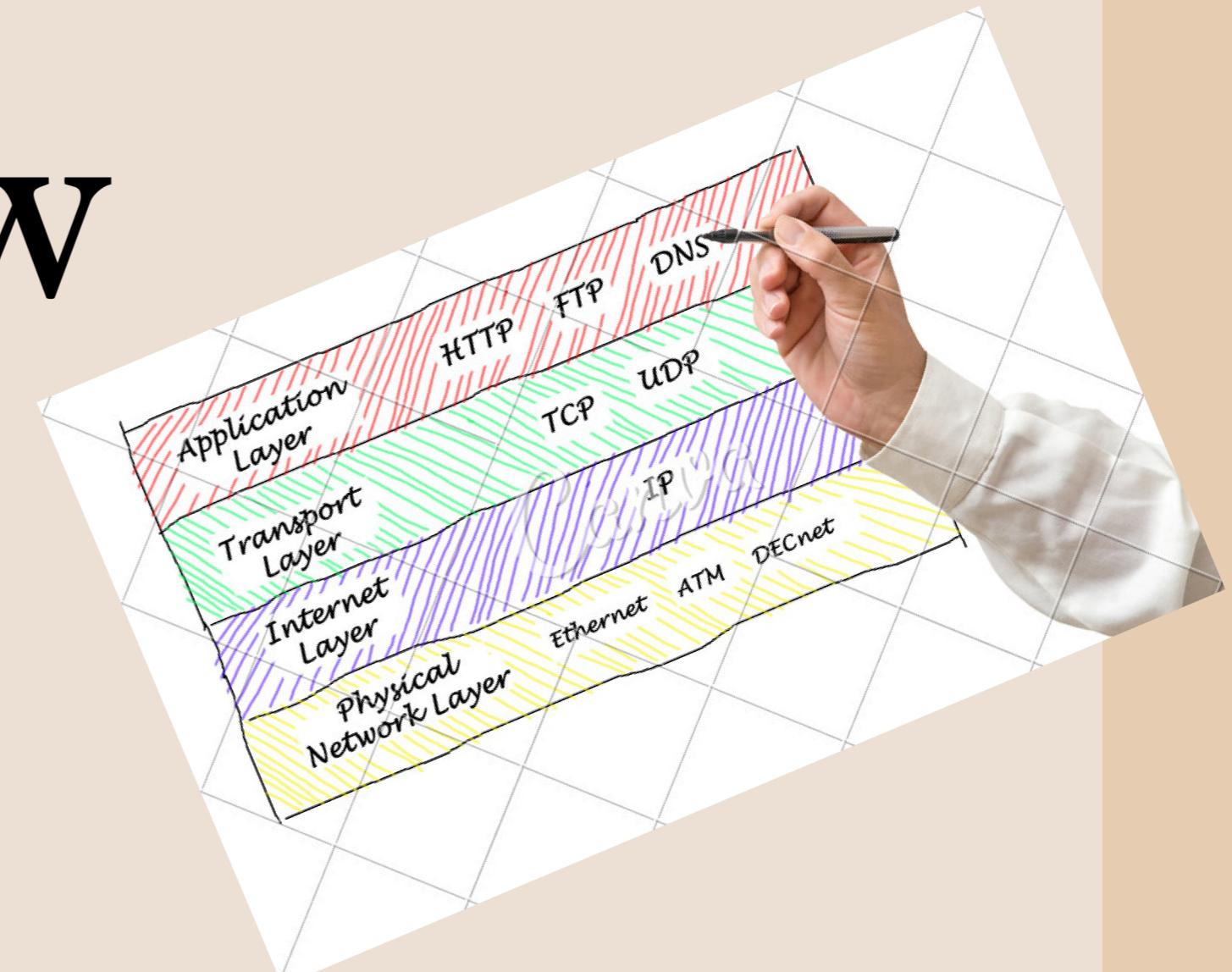


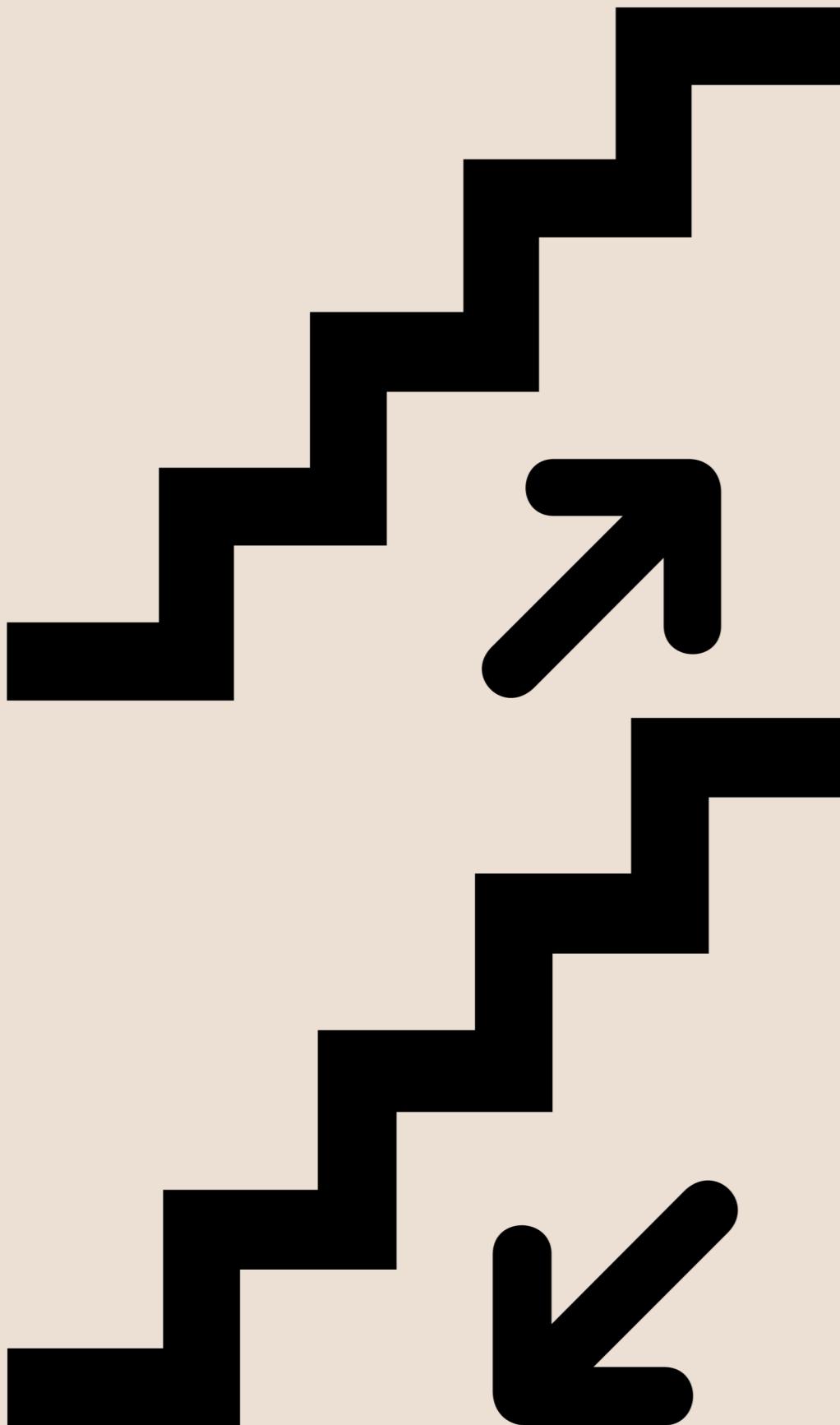


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I GO BACK N ARQ PROTOCOL



- It is a data link layer protocol that uses a sliding window method.
- In this method, sender transmits or sends various frames or packets before receiving any acknowledgement.
- Both the sender and receiver agree upon total number of data frames after which acknowledgement is needed to be transmitted.
- Sender sent multiple frame but receiver take one by one and after completing one frame acknowledge for new frame.

II SELECTIVE REPEAT PROTOCOL

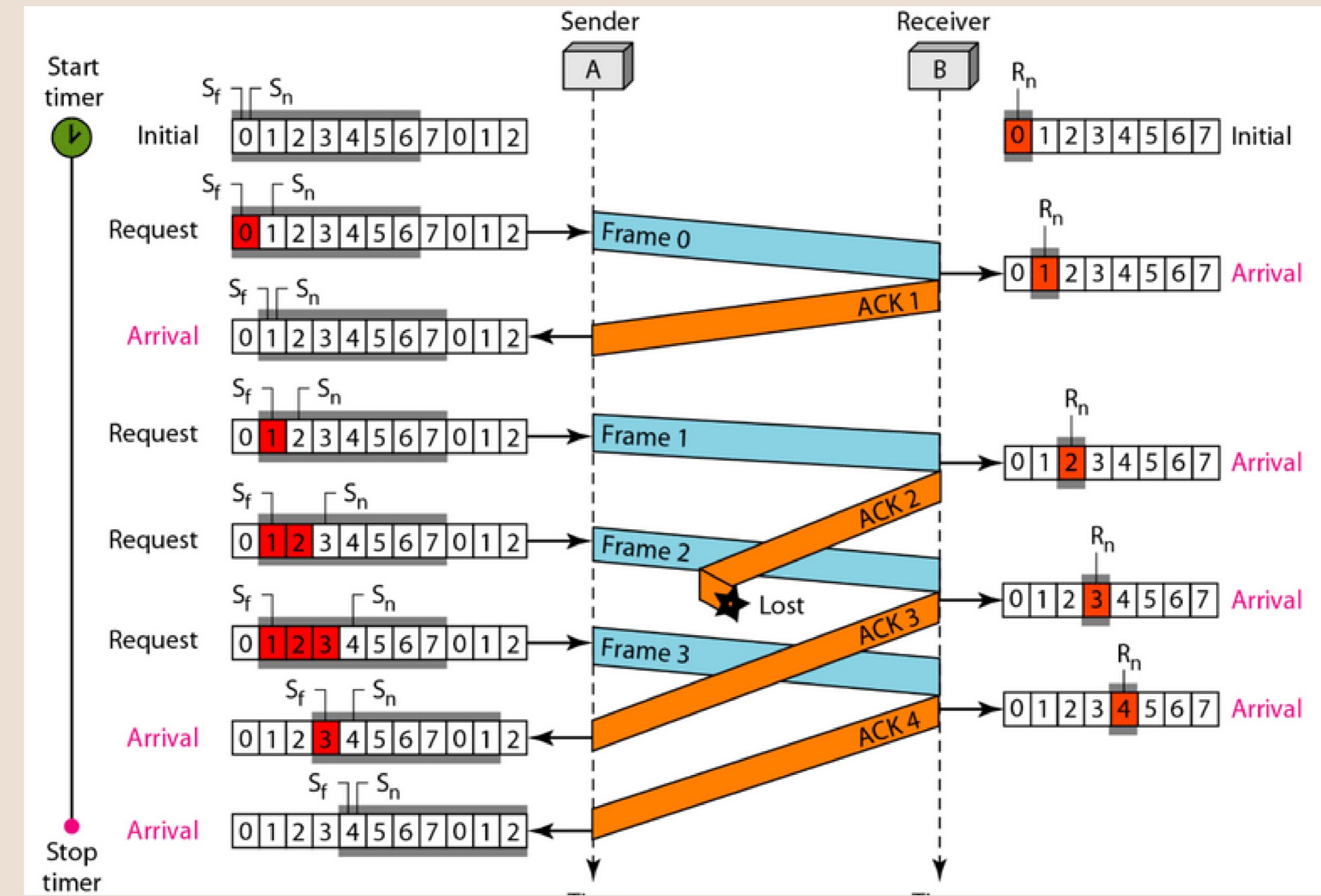
- Selective Repeat ARQ is also known as the Selective Repeat Automatic Repeat Request.
- It is a data link layer protocol that uses a sliding window method.
- If the receiver receives a corrupt frame, it does not directly discard it. It sends a negative acknowledgment to the sender.
- The sender sends that frame again as soon as on the receiving negative acknowledgment.
- There is no waiting for any time-out to send that frame.



III FLOWCHART

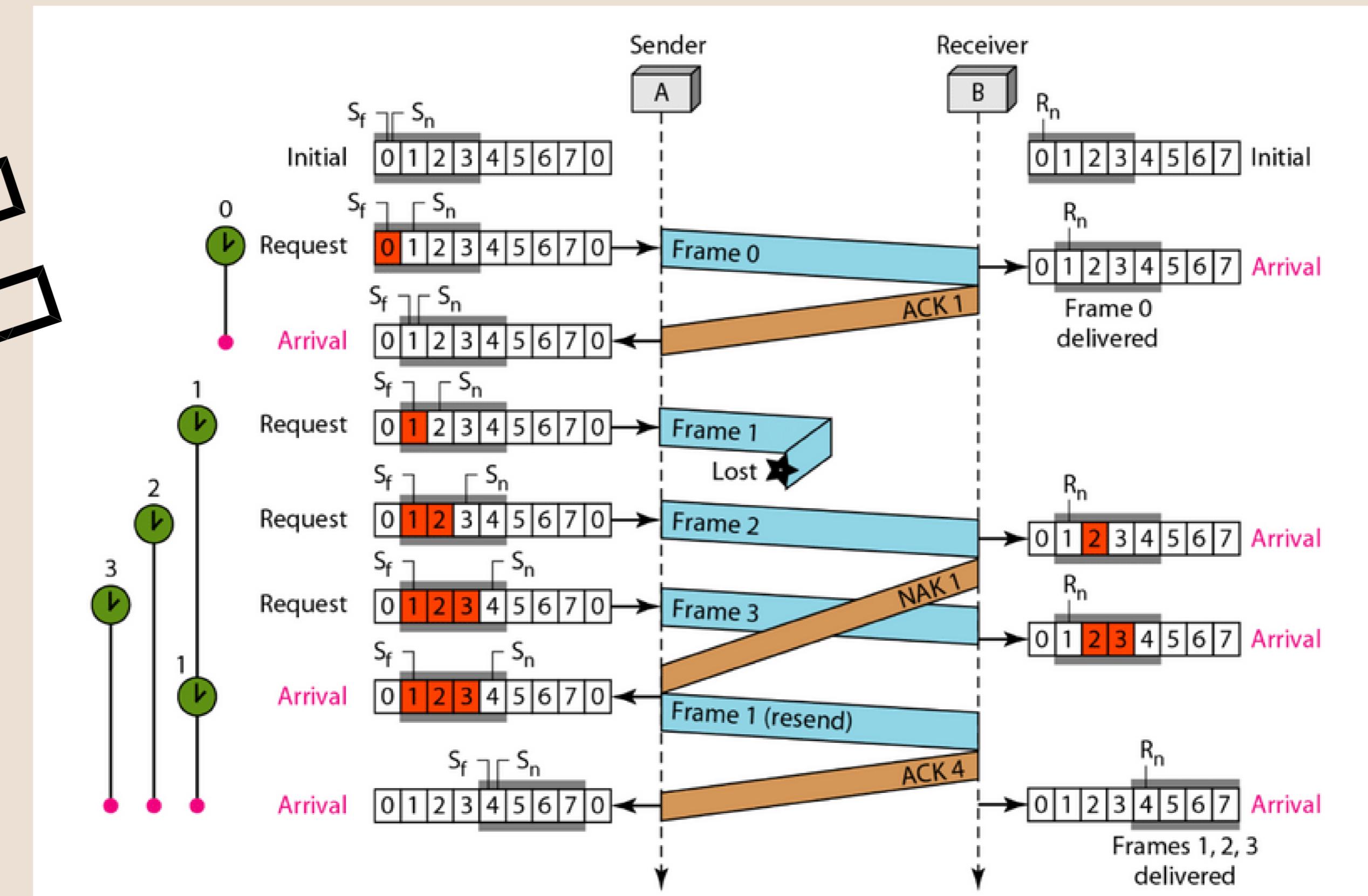
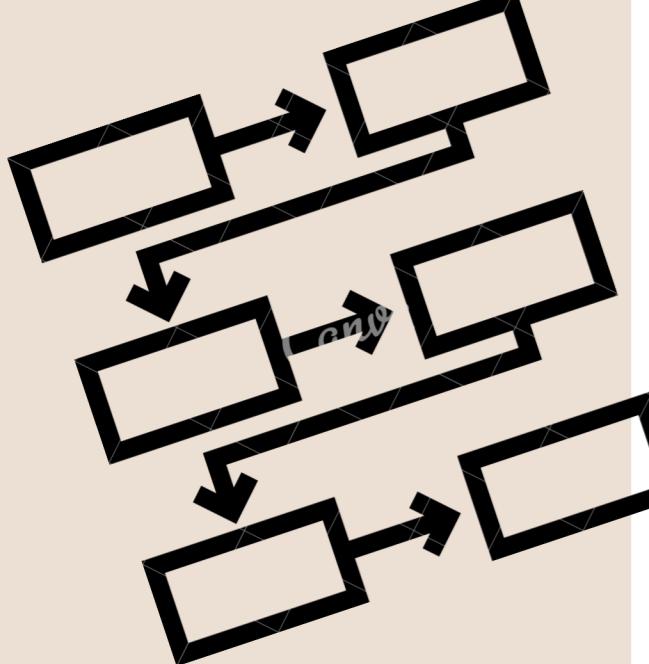


Go Back N ARQ Protocol



III FLOWCHART

Selective Repeat ARQ Protocol





IV MERITS & DENERITS



Go Back N ARQ

Selective Repeat ARQ

Merits

- Single Timer
- Simple
- Receiver doesn't need buffer to buffer out-of-order packets

Demerits

- Not efficient
- Waste bandwidth when a packet is lost/broken
- Send all frames again from one which is lost

Merits

- Efficient
- Only lost/broken packets need transmission
- Doesn't waste bandwidth

Demerits

- Complicated with multiple timers
- receiver needs a buffer to buffer out-of-order packets



Thank you