sender

send
make packet
trans (packet)

wait for send

wait for ACK or NAK

rcv. NAK
resend packet

rcv. ACK
Λ (do nothing)

receiver

wait
deliver data

rcv. correct
send ACK

rcv. incorrect
send NAK

rdt 2.0
rdt 2.1: corrupt ACK
- add seq. #

\[ \text{send (data)} \quad \text{make pkt 0}\]
\[ \text{wait for ACK 0} \]  \[ \text{wait to send 1} \]
\[ \text{rcv NAK or rcv. corrupt} \]
\[ \text{resend} \]

\[ \text{rcv ACK 1} \]

\[ \text{rcv pkt and not corr. and seq = 0} \]

\[ \text{Send ACK, deliver data} \]
\[ \text{wait for pkt 0} \]
\[ \text{wait for 1} \]

\[ \text{rcv. corrupt} \]
\[ \text{Send NAK, resend Ack} \]
\[ \text{rcv pkt 1} \]
\[ \text{send Ack, resend Ack} \]

\[ \text{rdt 2.2} \]
\[ \text{no NAK} \]
rdt 3.0

loss + error

send (data)

make pkt
transfer start timer

wait send 0

wait Ack 2

wait Ack 0

rcv pkt corrupt OR
ACK = 1

rcv Ack 0
not corrupt
stop timer

timeout resend pkt
start timer

wait send 1