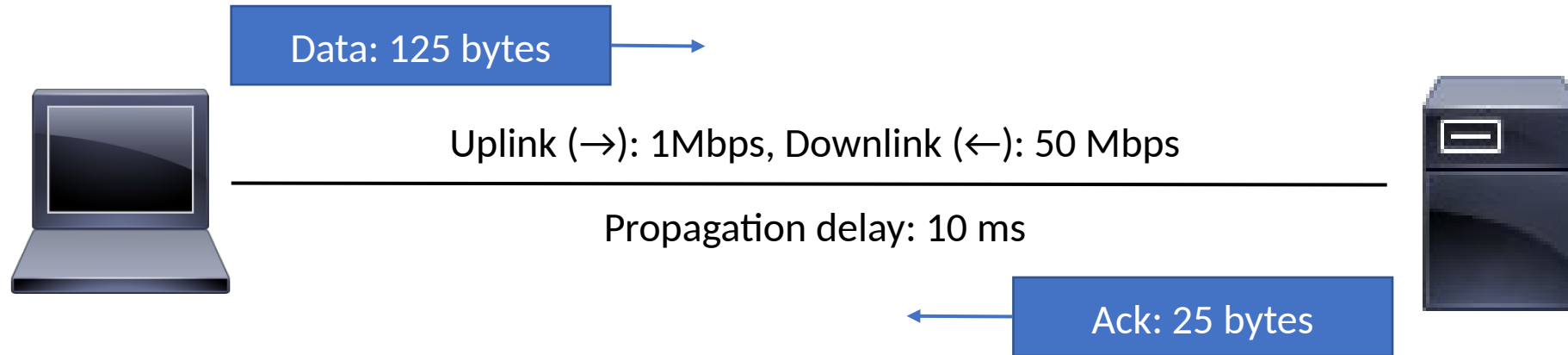


LINFO1341

TP - Reliable transfer

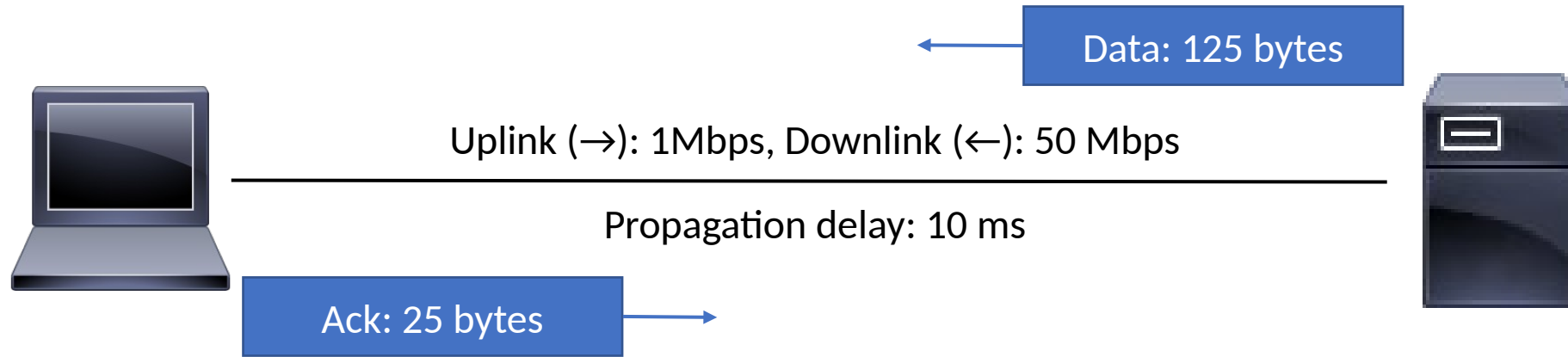
<https://beta.computer-networking.info/syllabus/default/exercises/reliability.html>

Open question 2



Maximum throughput of the alternating bit protocol?

Open question 2



Maximum throughput of the alternating bit protocol?

Open question 3



Uplink (→): 1Mbps, Downlink (←): 50 Mbps

Propagation delay: 10 ms



Duration of the retransmission timer in the alternating bit protocol?

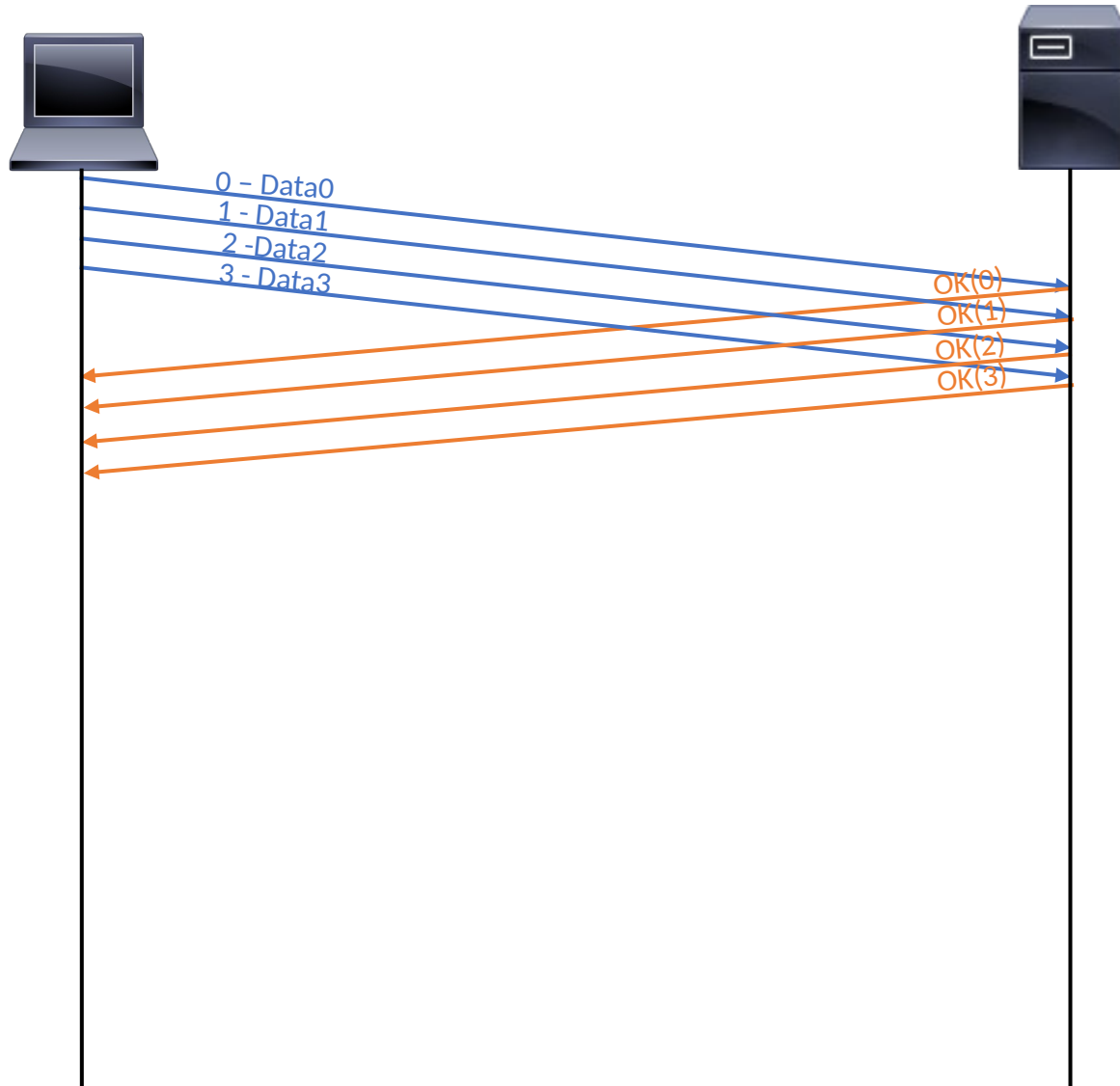
Discussion : the alternating bit protocol

Open question 6: go-back-n no loss case

Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

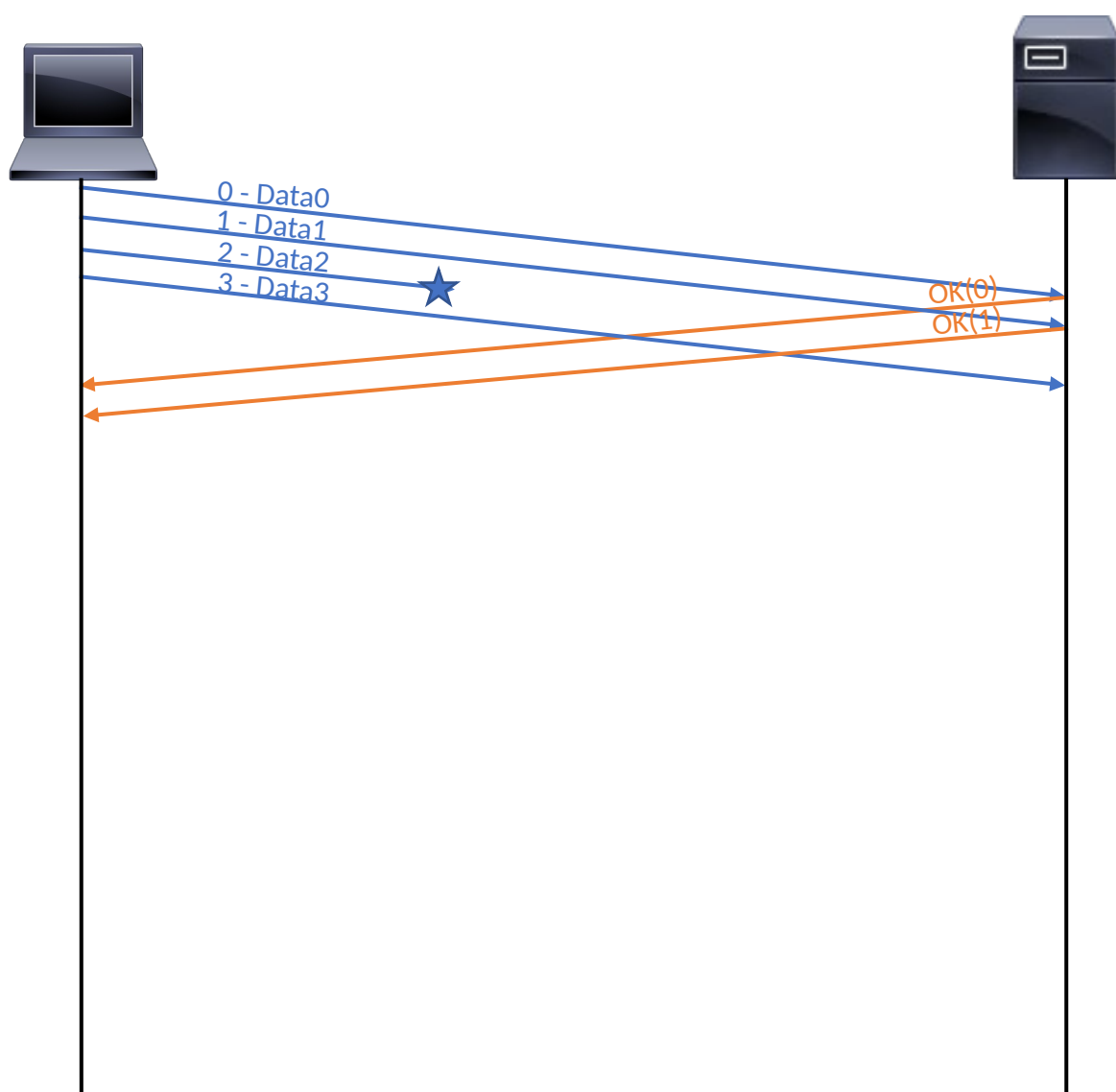
Window size = 4 frames

10 data frames, of equal size (10000 bits)



Discussion : go-back-n

OQ 6: go-back-n, 3rd and 7th frames lost

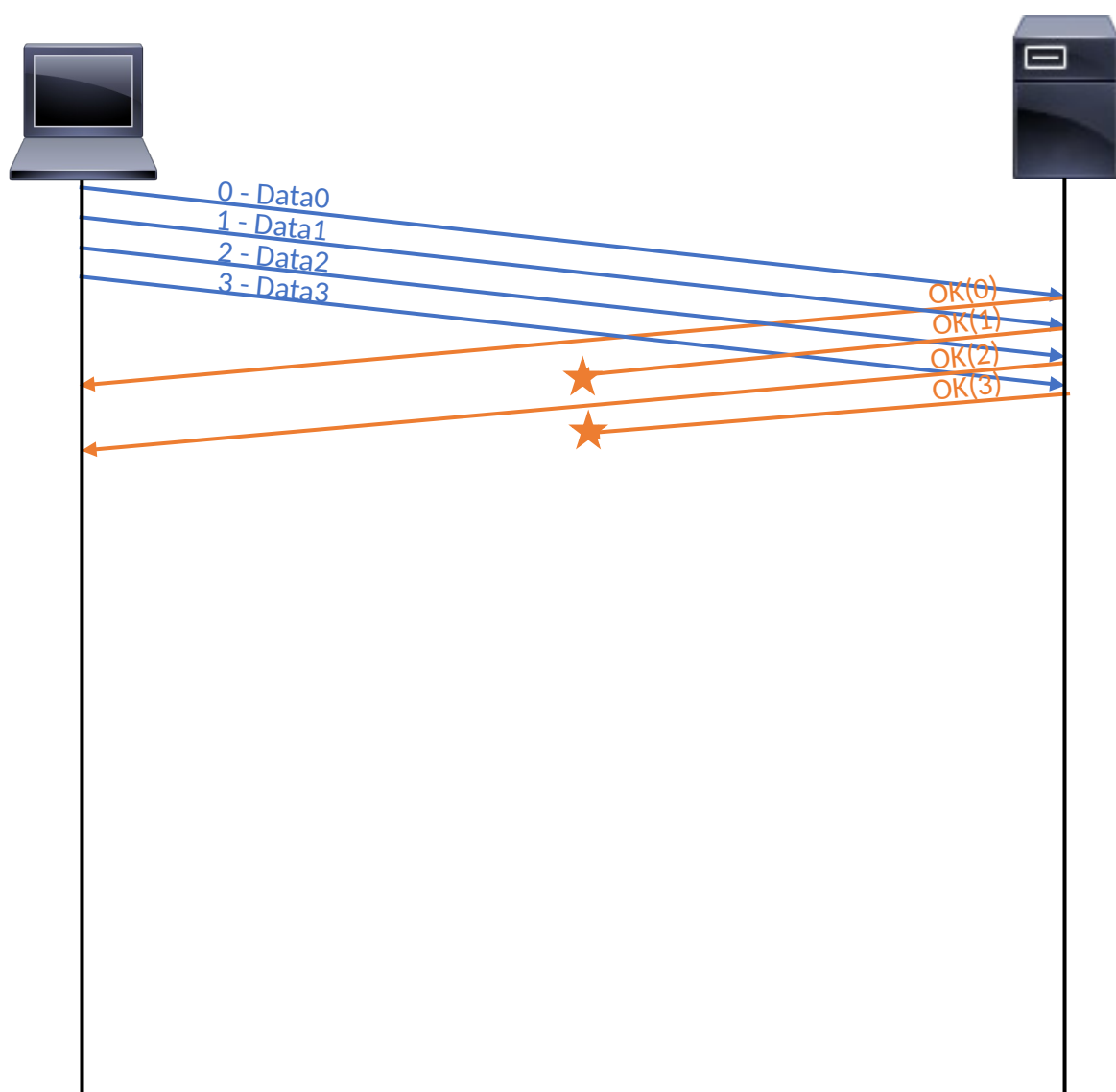


Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

Window size = 4 frames

10 data frames, of equal size (10000 bits)

OQ6: go-back-n, every second ack lost



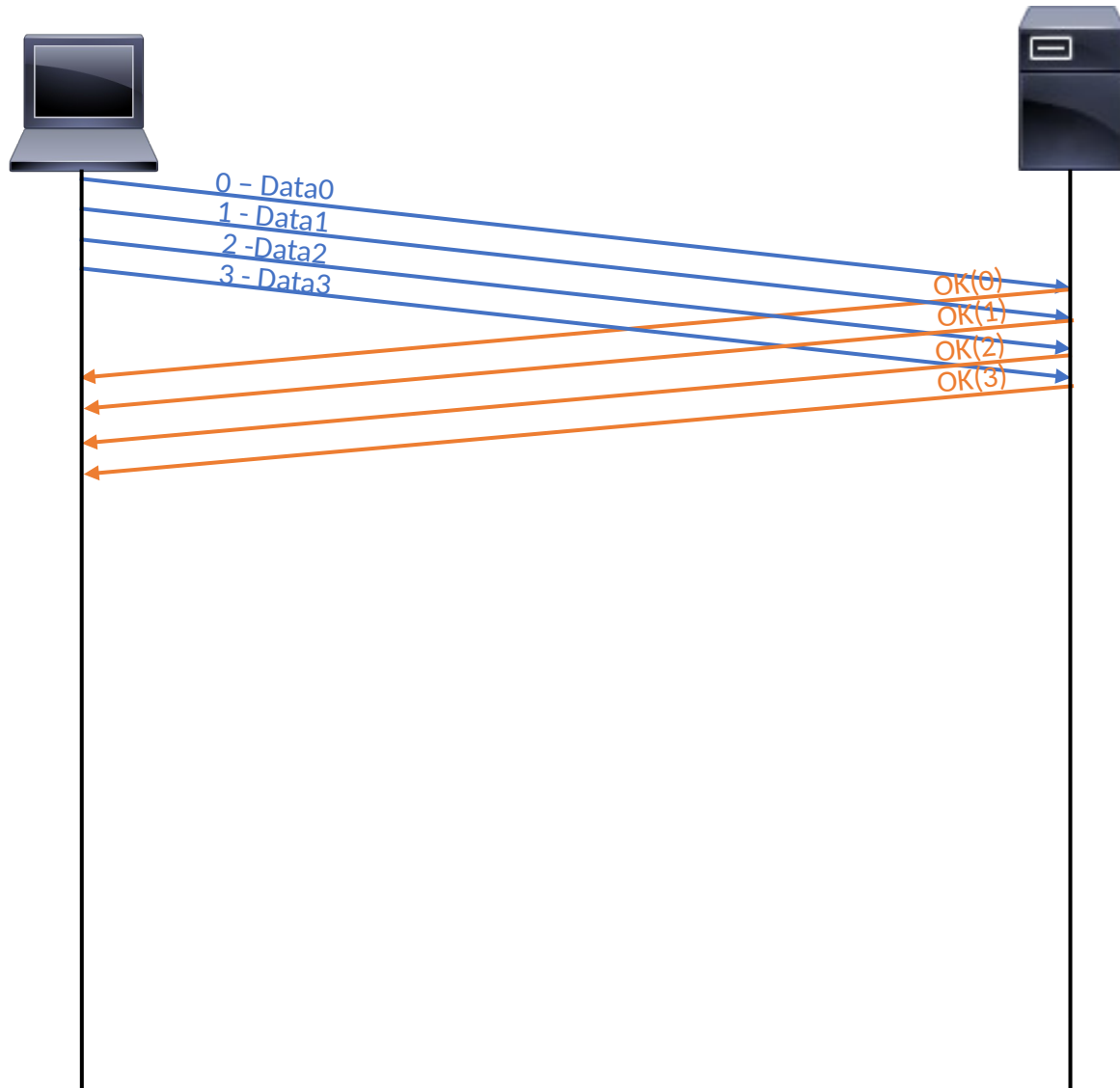
Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

Window size = 4 frames

10 data frames, of equal size (10000 bits)

Discussion : go-back-n vs selective repeat

OQ 7: selective repeat, no loss case

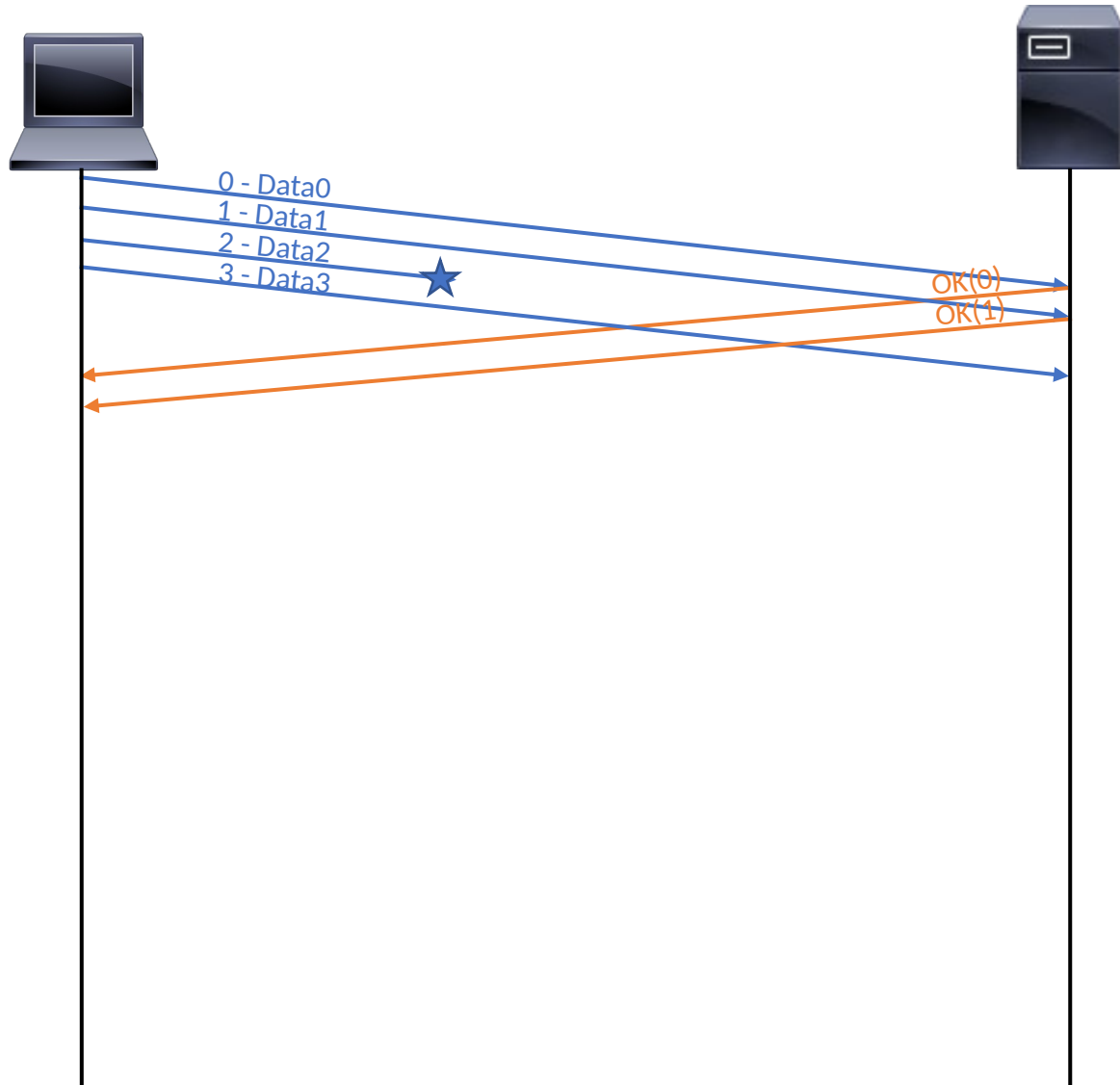


Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

Window size = 4 frames

10 data frames, of equal size (10000 bits)

OQ 7: selective repeat, 3rd and 7th frame lost

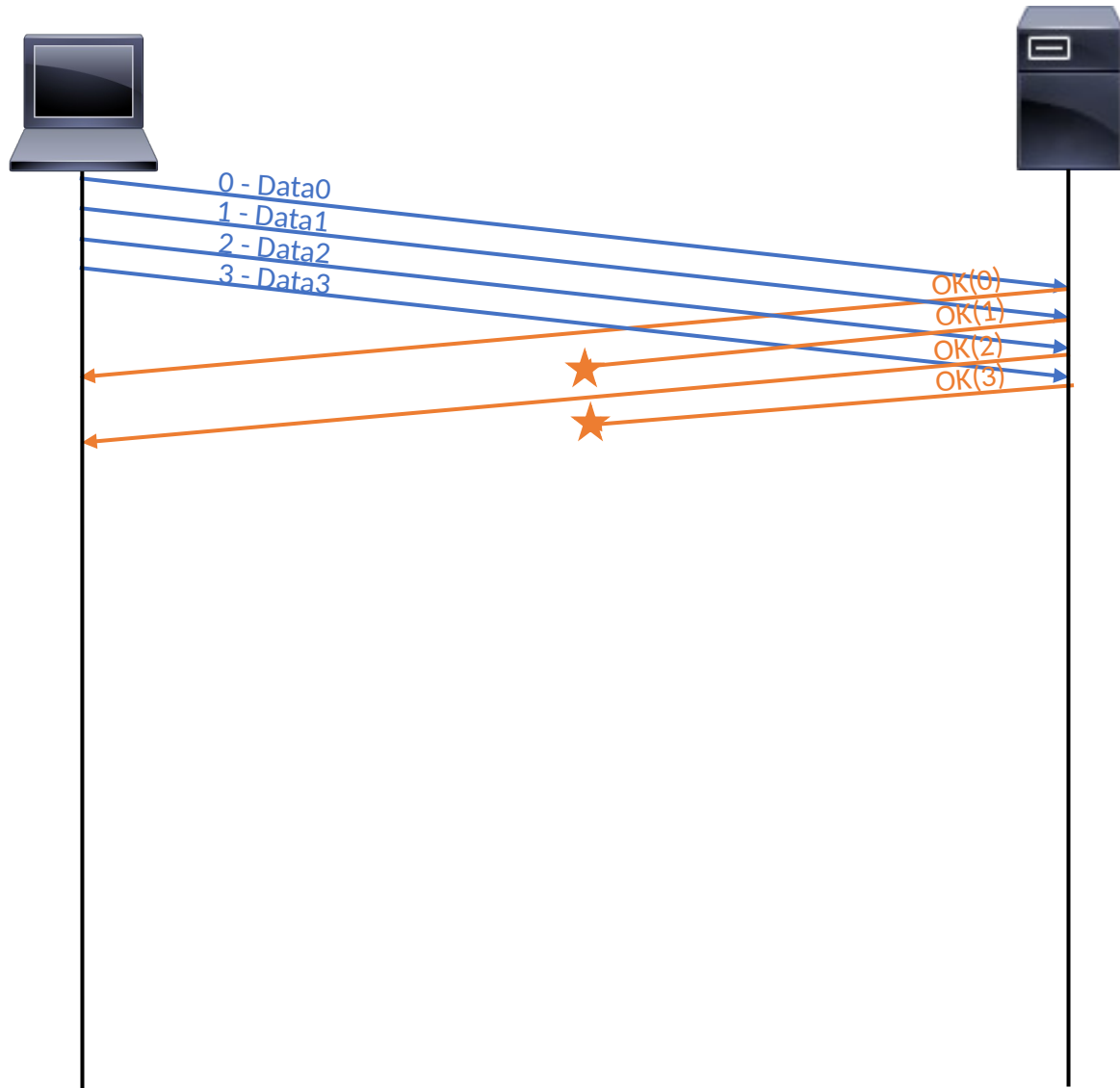


Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

Window size = 4 frames

10 data frames, of equal size (10000 bits)

OQ 7: selective repeat, every second ack lost



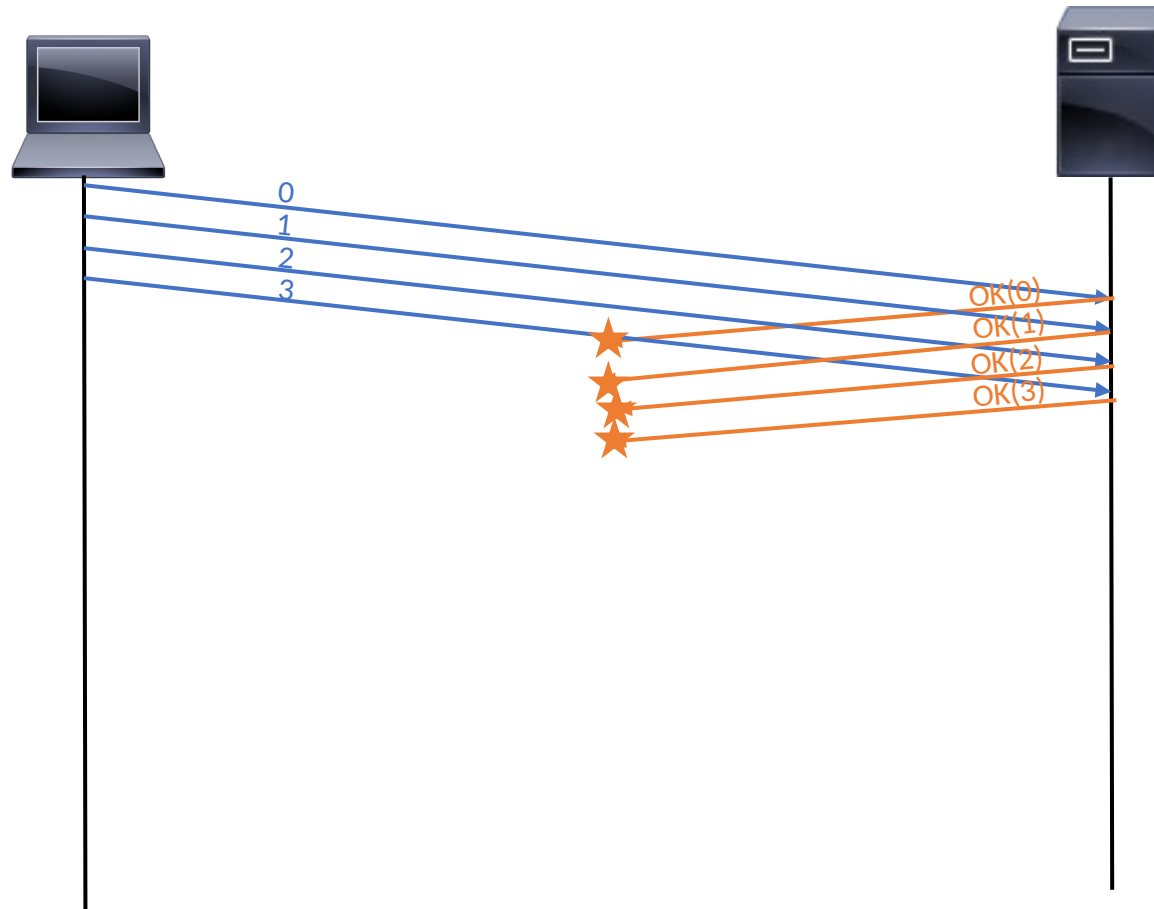
Sequence number on 3 bits (up to 2^3-1 , from 0 to 7 included)

Window size = 4 frames

10 data frames, of equal size (10000 bits)

Discussion question 4: go-back-n

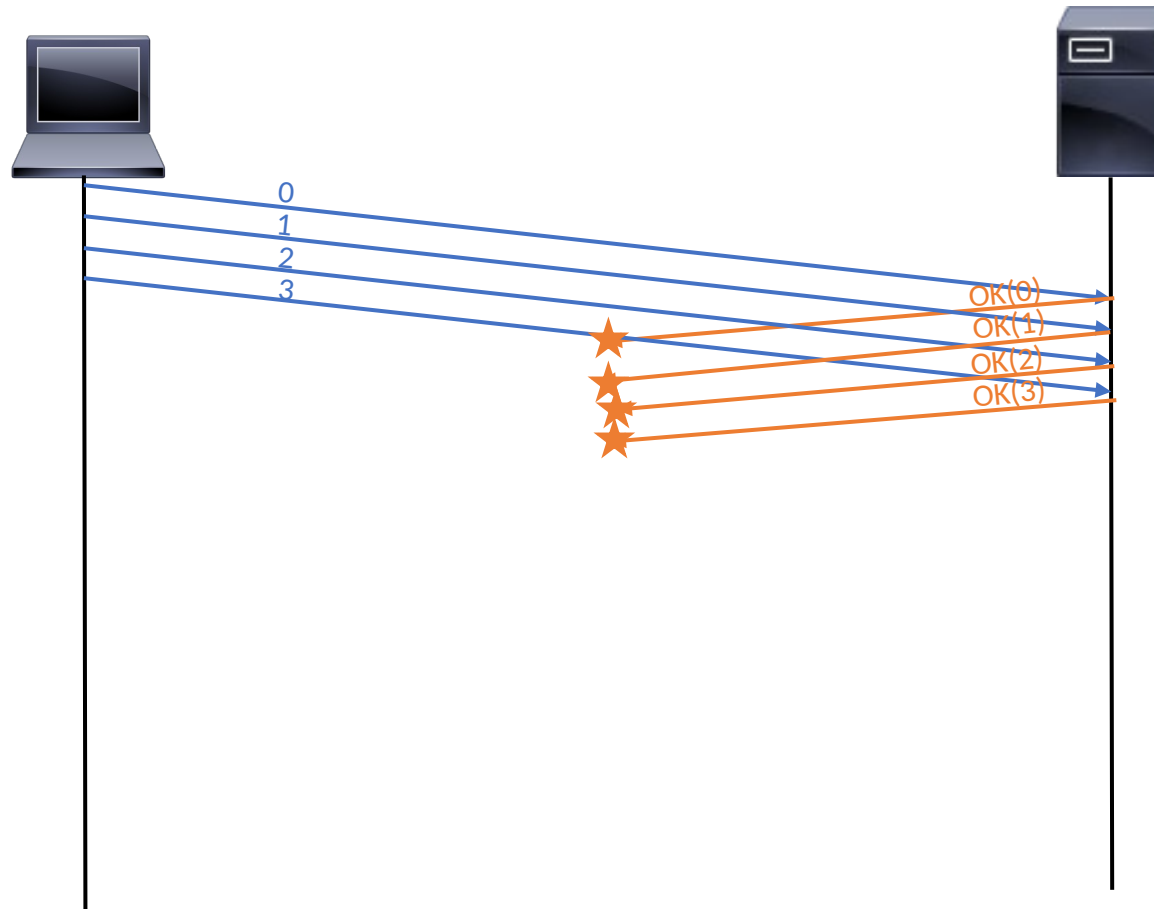
Sequence number on 2 bits
(up to 2^2-1 , from 0 to 3
included)



What happens next (complete the time sequence diagram)? How can you fix this?

Discussion question 5: selective repeat

Sequence number on 2 bits
(up to 2^2-1 , from 0 to 3
included)



What happens next (complete the time sequence diagram)? How can you fix this?