

CS2105

Problem Set 3

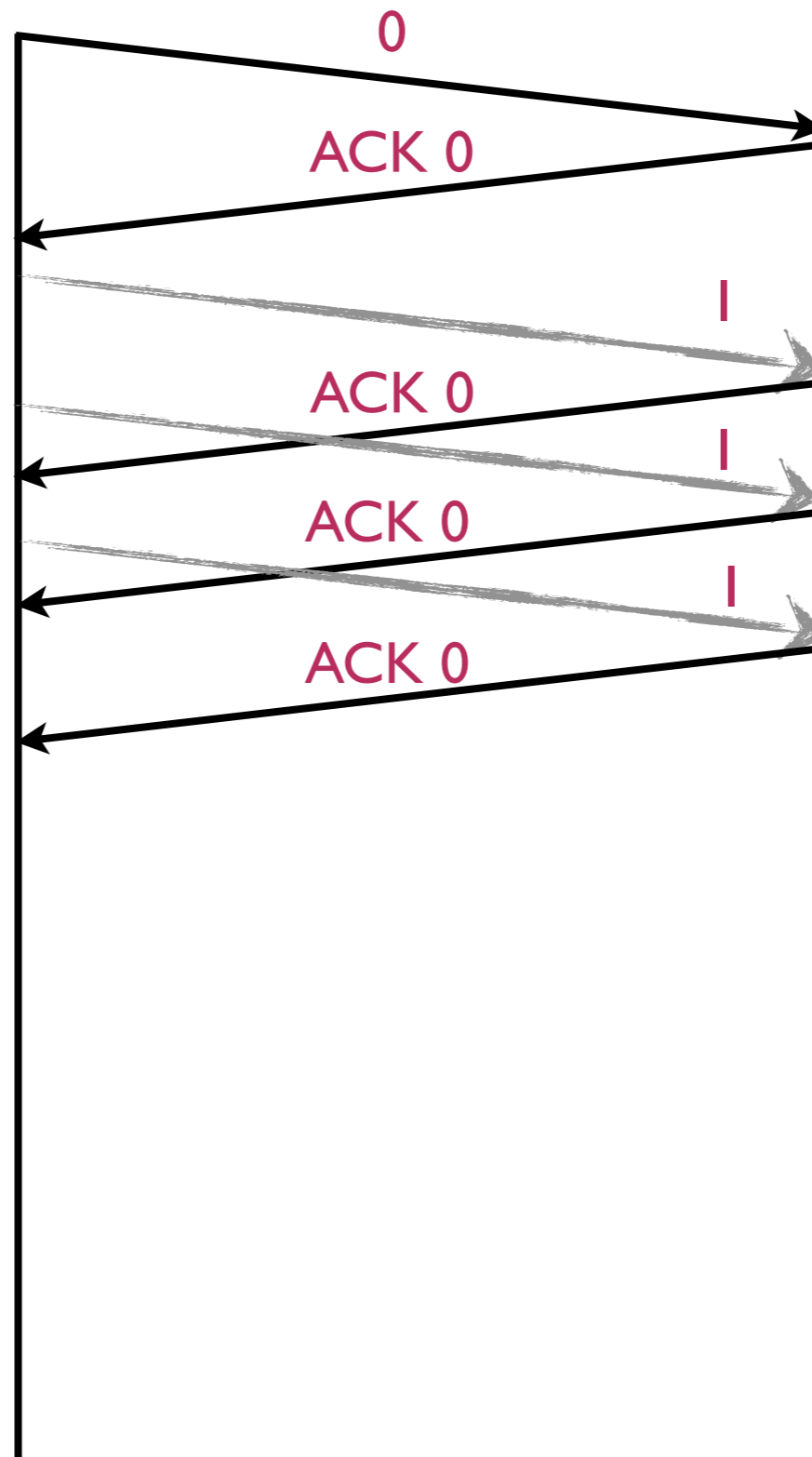
Question 2

What if:

Every packet with sequence number 1
is corrupted.

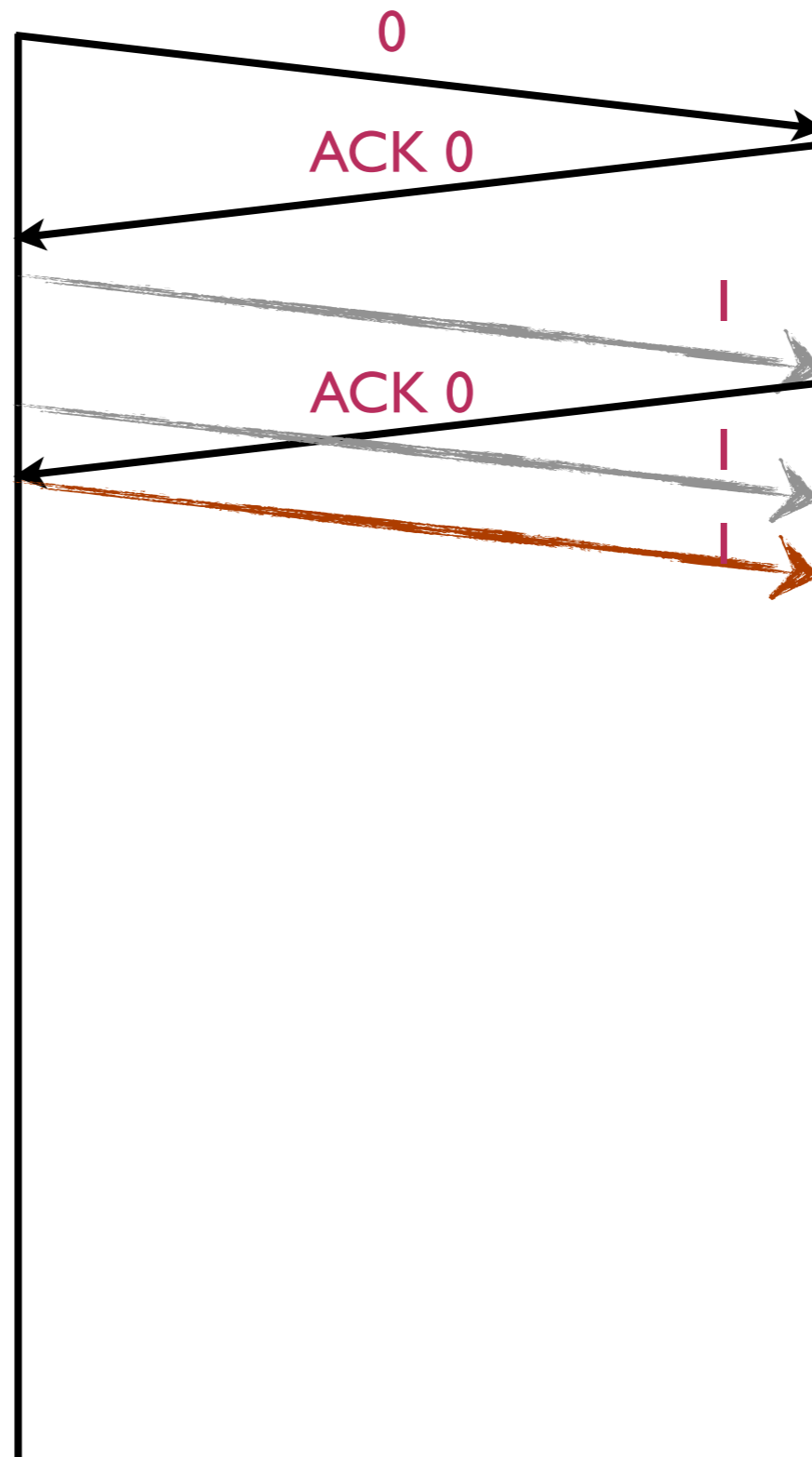
Every timeout is pre-mature.

Operation
according to
"standard"
FSM

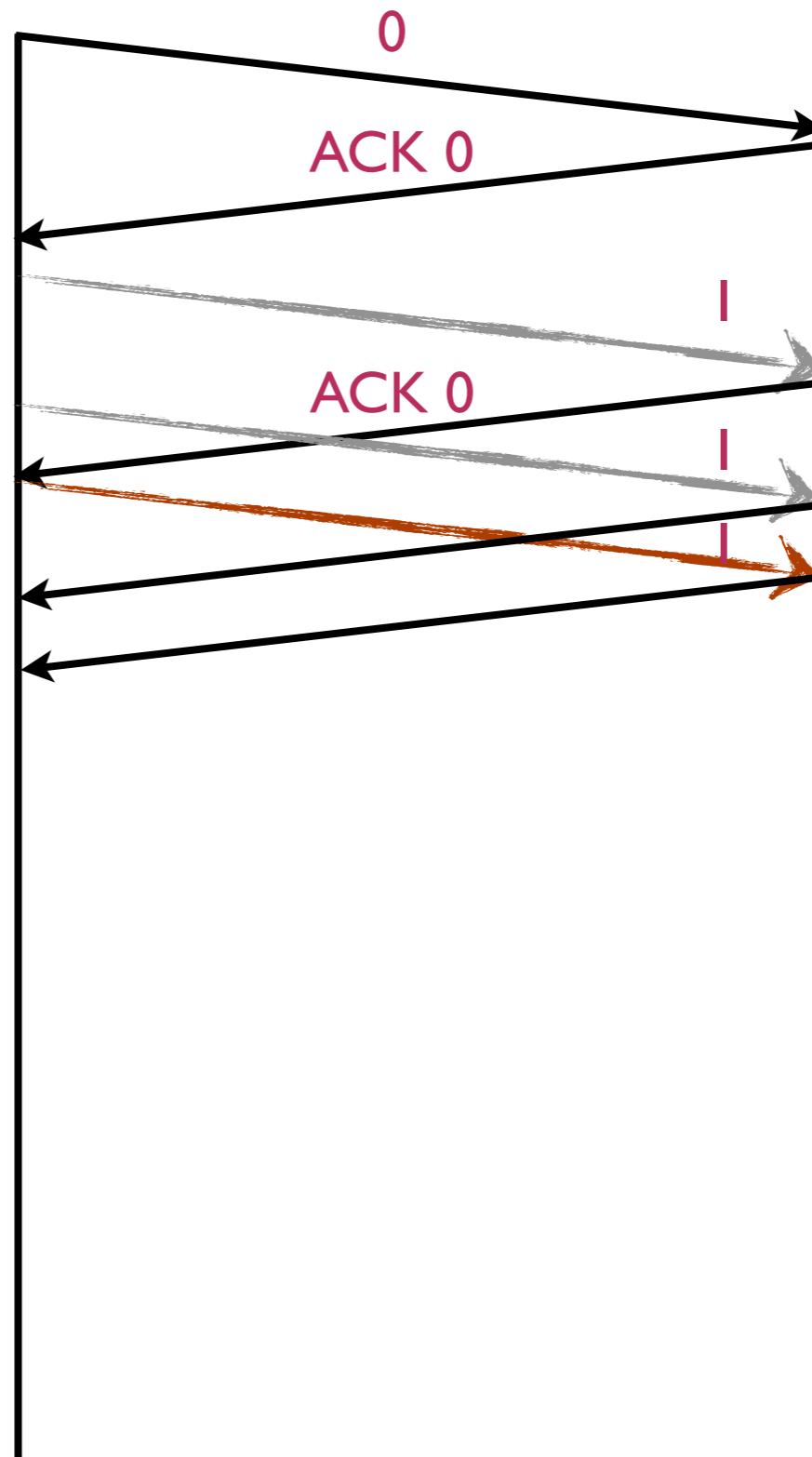


Operation according to "modified" FSM (step-by-step)

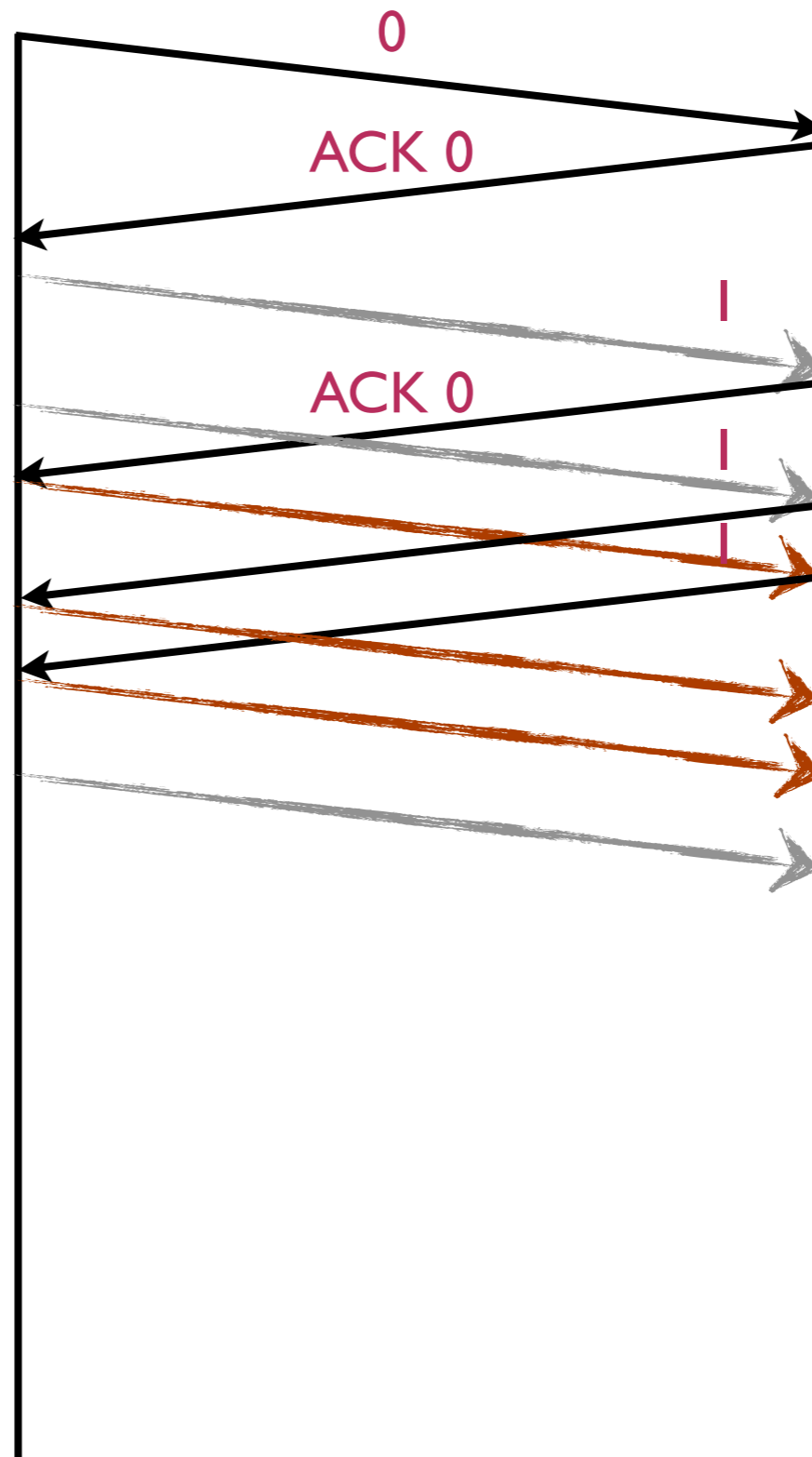
Retransmission triggered by ACK 0 is in red; by PTO in gray.

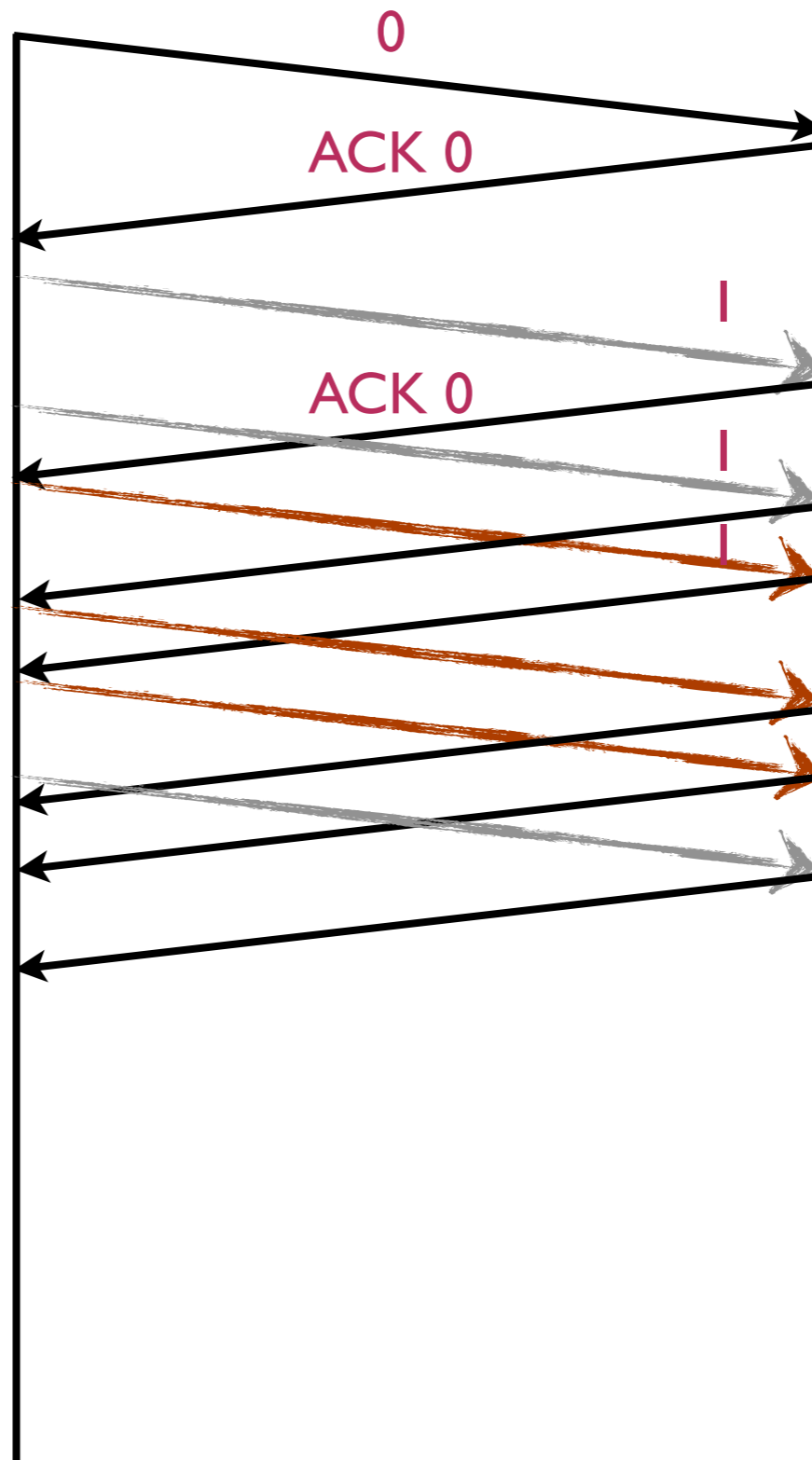


Packet 1 is retransmitted 2 more times.

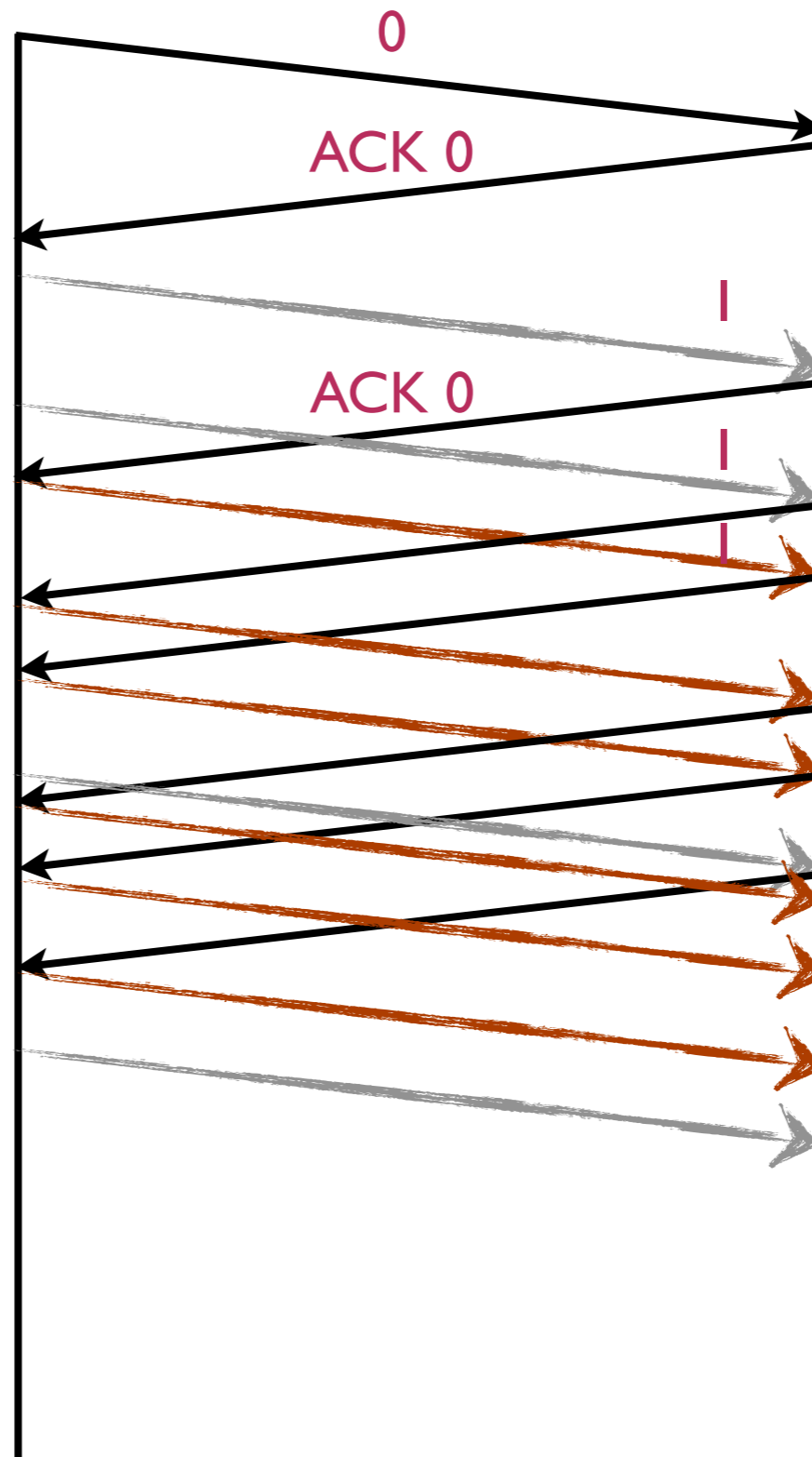


Packet 1 is retransmitted 3 more times.





Packet 1 is retransmitted 4 more times.



The protocol still works, but the total number of packets sent is increasing quickly!
(1, 3, 5, 9, 13, ...)