Simulator . run()

Initialize arrays:
segments[k] = null
acks[k] = null

iteration i > 0?

Yes

Call:
Sender . send(segments[], rcvWindow, outcome)

No

Call:
Sender . processAcks(acks[])
determine the “outcome”

Call:
Router . relay(segments[])

Call:
Receiver . receive(segments[], acks[]) obtain “rcvWindow”

Loop i ∈ [0, numIter)
Sender . send()

Calculate sending params:
flightSize = lastByteSent – lastByteAcked
effectiveWindow = Min(congWindow, rcvWindow) – flightSize

effectiveWindow <= 0 ?
Yes → effectiveWindow = 1
No
Segment loss detected ?
Yes → segments[0] ← (lastByteAcked+1, MSS)
No
burstSize = effectiveWindow / MSS

burstSize == 0 ?
Yes → segments[0] ← (lastByteSent+1, 1)
No
Loop i ∈ [0, burstSize)
segments[i] ← (lastByteSent+1 + i×MSS, MSS)