```
Last login: Wed Nov  8 01:38:44 on ttys000
dhcp-wifi-8021x-155-41-119-170:~ Darren$ cd Documents/CS_455/PA-2
dhcp-wifi-8021x-155-41-119-170:PA-2 Darren$ ls
Event.class                        OSIRandom.java
Event.ctxt                         OutputFile
Event.java                         Packet.class
EventList.class                    Packet.ctxt
EventList.ctxt                     Packet.java
EventList.java                     Project.class
EventListImpl.class                Project.ctxt
EventListImpl.ctxt                 Project.java
EventListImpl.java                 README.TXT
Message.class                      StudentNetworkSimulator.class
Message.ctxt                       StudentNetworkSimulator.ctxt
Message.java                       StudentNetworkSimulator.java
NetworkSimulator.class             case_outputs.pages
NetworkSimulator.ctxt              package.bluej
NetworkSimulator.java              terminalOutput
OSIRandom.class                    terminal_output
OSIRandom.ctxt                     terminal_output.pdf
dhcp-wifi-8021x-155-41-119-170:PA-2 Darren$ javac Project.java
dhcp-wifi-8021x-155-41-119-170:PA-2 Darren$ java Project
-- * Network Simulator v1.0 * --
Enter number of messages to simulate (> 0): [10] 1000
Enter packet loss probability (0.0 for no loss): [0.0] 0.1
Enter packet corruption probability (0.0 for no corruption): [0.0] 0.1
Enter average time between messages from sender's layer 5 (> 0.0):
[1000] 200
Enter window size (> 0): [8] 8
Enter retransmission timeout (>0.0) [15.0] 30
Enter trace level (>= 0): [0] 3
Enter random seed: [0] 1234
generateNextArrival(): called
generateNextArrival(): time is 0.0
generateNextArrival(): future time for event 1 at entity 0 will be
43.4339426862392

EVENT time: 43.4339426862392  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 43.4339426862392
generateNextArrival(): future time for event 1 at entity 0 will be
67.36045411542099
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -1941  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 43.4339426862392
```

```
Packet: 0 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 43.43
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____


EVENT time: 45.66060365611743  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 45.66060365611743
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 47.569475386822106  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 47.569475386822106
Recieved ACK for last sent packet. Stopping Timer at
47.569475386822106
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 67.36045411542099  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67.36045411542099
generateNextArrival(): future time for event 1 at entity 0 will be
83.31553086947233
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -1962  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
startTimer: starting timer at 67.36045411542099
Packet: 1 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 67.36
Packet added to retransmission buffer at index [0]
Next sequence number: 2
```

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EVENT time: 83.31553086947233 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 83.31553086947233
generateNextArrival(): future time for event 1 at entity 0 will be
238.65474410229803
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −1983 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 83.31553086947233
startTimer: starting timer at 83.31553086947233
Packet: 2 With Payload: cccccccccccccccccccc sent to B
Timer started at: 83.32
Packet added to retransmission buffer at index [1]
Next sequence number: 3

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EVENT time: 84.74373607593004 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 1   rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 113.31553086947233 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 113.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: −1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
toLayer3: seqnum: 2 acknum: 0 checksum: −1983 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 113.31553086947233
Starting timer for packet 2 at time 113.31553086947233

_____

EVENT time: 115.28290658284249 type: 2 entity: 1

bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 115.28290658284249
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being lost
In order ACK 1 Sent

_____

EVENT time: 119.9642628254036 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 119.9642628254036
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 123.63374736777854 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Cumulative ACK 2received
stopTimer: stopping timer at 123.63374736777854
Recieved ACK for last sent packet. Stopping Timer at
123.63374736777854
Sliding window 2 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 238.65474410229803 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 238.65474410229803
generateNextArrival(): future time for event 1 at entity 0 will be
529.581591235084
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2004 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side

startTimer: starting timer at 238.65474410229803
Packet: 3 With Payload: dddddddddddddddddddd sent to B
Timer started at: 238.65
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 241.6328928495132 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 241.6328928495132
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 249.96951200903345 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 249.96951200903345
Recieved ACK for last sent packet. Stopping Timer at
249.96951200903345
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 529.581591235084 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 529.581591235084
generateNextArrival(): future time for event 1 at entity 0 will be
924.1126743369853
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 529.581591235084
Packet: 4 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 529.58
Packet added to retransmission buffer at index [0]

Next sequence number: 5
_____

EVENT time: 536.3943601794488 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 536.3943601794488
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 538.9286477248451 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 1.0

_____

EVENT time: 559.581591235084 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 559.58
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 559.581591235084
Starting timer for packet 4 at time 559.581591235084

_____

EVENT time: 565.8367870113224 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 565.8367870113224
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 589.581591235084 type: 0 entity: 0

```
aTimerInterrup()_____
TIMEOUT!!! at: 589.58
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4  acknum: 0  checksum: -2025  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 589.581591235084
Starting timer for packet 4 at time 589.581591235084

_____


EVENT time: 590.6389965514084  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 590.6389965514084
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____


EVENT time: 594.7169103061005  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 594.7169103061005
Recieved ACK for last sent packet. Stopping Timer at 594.7169103061005
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 924.1126743369853  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 924.1126743369853
generateNextArrival(): future time for event 1 at entity 0 will be
1241.9812616351817
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2046  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 924.1126743369853
Packet: 5 With Payload: ffffffffffffffffffff sent to B
Timer started at: 924.11
Packet added to retransmission buffer at index [0]
```

Next sequence number: 6
_____

EVENT time: 926.3525193029571 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 926.3525193029571
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 934.2645039216284 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 934.2645039216284
Recieved ACK for last sent packet. Stopping Timer at 934.2645039216284
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 1241.9812616351817 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 1241.9812616351817
generateNextArrival(): future time for event 1 at entity 0 will be
1468.8802758873255
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2067 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 1241.9812616351817
Packet: 6 With Payload: gggggggggggggggggggg sent to B
Timer started at: 1241.98
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 1247.7340922269357 type: 2 entity: 1

bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 1247.7340922269357
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 1252.6571550645467 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 1252.6571550645467
Recieved ACK for last sent packet. Stopping Timer at
1252.6571550645467
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 1468.8802758873255 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 1468.8802758873255
generateNextArrival(): future time for event 1 at entity 0 will be
1627.3689992980742
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2088 payload:
hhhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 1468.8802758873255
Packet: 7 With Payload: hhhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 1468.88
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 1472.9024323252052 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 1472.9024323252052
Packet received is in order. Delivering packet(s) to layer5

Packet 7 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 1481.3371074556717 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 1481.3371074556717
Recieved ACK for last sent packet. Stopping Timer at
1481.3371074556717
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 1627.3689992980742 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 1627.3689992980742
generateNextArrival(): future time for event 1 at entity 0 will be
1801.1291848506119
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2109 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 1627.3689992980742
Packet: 8 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 1627.37
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 1634.7547227393413 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 1634.7547227393413
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side

In order ACK 8 Sent

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EVENT time: 1641.9119235816522 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 1641.9119235816522
Recieved ACK for last sent packet. Stopping Timer at
1641.9119235816522
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 1801.1291848506119 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 1801.1291848506119
generateNextArrival(): future time for event 1 at entity 0 will be
1866.9148838770714
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2130 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 1801.1291848506119
Packet: 9 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 1801.13
Packet added to retransmission buffer at index [0]
Next sequence number: 10

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EVENT time: 1802.5637073885312 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 1802.5637073885312
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 1810.6514786217842 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 1810.6514786217842
Recieved ACK for last sent packet. Stopping Timer at
1810.6514786217842
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 1866.9148838770714 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 1866.9148838770714
generateNextArrival(): future time for event 1 at entity 0 will be
2218.2317575609604
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 1866.9148838770714
Packet: 10 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 1866.91
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 1870.9765923032319 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 1870.9765923032319
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

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EVENT time: 1872.5663014618365 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received

stopTimer: stopping timer at 1872.5663014618365
Recieved ACK for last sent packet. Stopping Timer at
1872.5663014618365
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 2218.2317575609604 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 2218.2317575609604
generateNextArrival(): future time for event 1 at entity 0 will be
2271.419415875728
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 2218.2317575609604
Packet: 11 With Payload: lllllllllllllllllll sent to B
Timer started at: 2218.23
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 2222.1382793664357 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 2222.1382793664357
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

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EVENT time: 2225.687185277871 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 2225.687185277871
Recieved ACK for last sent packet. Stopping Timer at 2225.687185277871
Sliding window 1 times
New send_base: 12 send_end: 3

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 2271.419415875728 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 2271.419415875728
generateNextArrival(): future time for event 1 at entity 0 will be
2670.3329569383827
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: packet being lost
startTimer: starting timer at 2271.419415875728
Packet: 12 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 2271.42
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 2301.419415875728 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 2301.42
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 2301.419415875728
Starting timer for packet 12 at time 2301.419415875728

_____

EVENT time: 2310.9755546739093 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 2310.9755546739093
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 2313.6268501846366 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 2.0

_____

EVENT time: 2331.419415875728 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 2331.42
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 2331.419415875728
Starting timer for packet 12 at time 2331.419415875728

_____

EVENT time: 2335.8033082064267 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 2335.8033082064267
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 2345.4984282967616 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 2345.4984282967616
Recieved ACK for last sent packet. Stopping Timer at
2345.4984282967616
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 2670.3329569383827 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 2670.3329569383827
generateNextArrival(): future time for event 1 at entity 0 will be
2705.600146488845

aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2214 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 2670.3329569383827
Packet: 13 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 2670.33
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 2677.9881282998135 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 2677.9881282998135
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____

EVENT time: 2680.201330607013 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 2680.201330607013
Recieved ACK for last sent packet. Stopping Timer at 2680.201330607013
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 2705.600146488845 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 2705.600146488845
generateNextArrival(): future time for event 1 at entity 0 will be
2720.2368236335333
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2235 payload:

oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 2705.600146488845
Packet: 14 With Payload: oooooooooooooooooooo sent to B
Timer started at: 2705.60
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 2714.5012054811236 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 2714.5012054811236
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 2720.2368236335333 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 2720.2368236335333
generateNextArrival(): future time for event 1 at entity 0 will be
3072.298348948637
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 2720.2368236335333
startTimer: starting timer at 2720.2368236335333
Packet: 15 With Payload: pppppppppppppppppppp sent to B
Timer started at: 2720.24
Packet added to retransmission buffer at index [1]
Next sequence number: 0

_____

EVENT time: 2724.013672292245 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
Sliding window 1 times

New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 2730.15140232551 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 2750.2368236335333 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 2750.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 2750.2368236335333
Starting timer for packet 15 at time 2750.2368236335333

_____

EVENT time: 2758.5674001281773 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 2758.5674001281773
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 2765.9866328928492 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 2765.9866328928492
Recieved ACK for last sent packet. Stopping Timer at
2765.9866328928492
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3072.298348948637 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3072.298348948637
generateNextArrival(): future time for event 1 at entity 0 will be
3329.898983733634
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2261 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3072.298348948637
Packet: 0 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 3072.30
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 3081.896786400952 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 3081.896786400952
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 3085.8170415356913 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 3085.8170415356913
Recieved ACK for last sent packet. Stopping Timer at
3085.8170415356913
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3329.898983733634 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3329.898983733634

generateNextArrival(): future time for event 1 at entity 0 will be
3418.0120242927333
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2282 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3329.898983733634
Packet: 1 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 3329.90
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 3332.0187994018365 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 3332.0187994018365
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 3335.803918576616 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 3335.803918576616
Recieved ACK for last sent packet. Stopping Timer at 3335.803918576616
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3418.0120242927333 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3418.0120242927333
generateNextArrival(): future time for event 1 at entity 0 will be
3508.8229010895107
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2

NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2303 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3418.0120242927333
Packet: 2 With Payload: sssssssssssssssssssss sent to B
Timer started at: 3418.01
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 3423.23584704123 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 3423.23584704123
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 3429.887386700033 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 3429.887386700033
Recieved ACK for last sent packet. Stopping Timer at 3429.887386700033
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3508.8229010895107 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3508.8229010895107
generateNextArrival(): future time for event 1 at entity 0 will be
3624.5002594073303
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2324 payload:
tttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3508.8229010895107

Packet: 3 With Payload: tttttttttttttttttttt sent to B
Timer started at: 3508.82
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 3510.3211462752156 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 3510.3211462752156
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 3512.466780602435 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 3512.466780602435
Recieved ACK for last sent packet. Stopping Timer at 3512.466780602435
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3624.5002594073303 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3624.5002594073303
generateNextArrival(): future time for event 1 at entity 0 will be
3722.2571489608445
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3624.5002594073303
Packet: 4 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 3624.50
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 3629.925138096255 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 3629.925138096255
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message uuuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 3630.9594714194154 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 3630.9594714194154
Recieved ACK for last sent packet. Stopping Timer at
3630.9594714194154
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 3722.2571489608445 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 3722.2571489608445
generateNextArrival(): future time for event 1 at entity 0 will be
4099.990844447157
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2366 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 3722.2571489608445
Packet: 5 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 3722.26
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 3724.2533646656693 type: 2 entity: 1
bInput() _____

Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 3724.2533646656693
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 3728.919064912869 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 3728.919064912869
Recieved ACK for last sent packet. Stopping Timer at 3728.919064912869
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 4099.990844447157 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4099.990844447157
generateNextArrival(): future time for event 1 at entity 0 will be
4157.353434858241
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2387 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4099.990844447157
Packet: 6 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 4099.99
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 4103.08380382702 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 4103.08380382702
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 7   rcv_end = 14

toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 4109.36921292764 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 4109.36921292764
Recieved ACK for last sent packet. Stopping Timer at 4109.36921292764
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 4157.353434858241 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4157.353434858241
generateNextArrival(): future time for event 1 at entity 0 will be
4289.657277138584
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2408 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4157.353434858241
Packet: 7 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 4157.35
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 4158.718192083498 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 4158.718192083498
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 4166.611774040955 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 4166.611774040955
Recieved ACK for last sent packet. Stopping Timer at 4166.611774040955
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 4289.657277138584 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4289.657277138584
generateNextArrival(): future time for event 1 at entity 0 will be
4348.277230140079
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2429 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4289.657277138584
Packet: 8 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 4289.66
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 4294.1878414258235 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 4294.1878414258235
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 4300.32026123844 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received

stopTimer: stopping timer at 4300.32026123844
Recieved ACK for last sent packet. Stopping Timer at 4300.32026123844
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 4348.277230140079 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4348.277230140079
generateNextArrival(): future time for event 1 at entity 0 will be
4402.1118808557385
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2450 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4348.277230140079
Packet: 9 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 4348.28
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 4352.475997192297 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 4352.475997192297
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 4360.09024323252 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 4360.09024323252
Recieved ACK for last sent packet. Stopping Timer at 4360.09024323252
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 4402.1118808557385 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4402.1118808557385
generateNextArrival(): future time for event 1 at entity 0 will be
4628.180791650136
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4402.1118808557385
Packet: 10 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 4402.11
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 4405.556138798181 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 4405.556138798181
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 4409.0715353862115 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 4409.0715353862115
Recieved ACK for last sent packet. Stopping Timer at
4409.0715353862115
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 4628.180791650136 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 4628.180791650136
generateNextArrival(): future time for event 1 at entity 0 will be
4808.081301309244
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
startTimer: starting timer at 4628.180791650136
Packet: 11 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 4628.18
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 4658.180791650136 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4658.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 4658.180791650136
Starting timer for packet 11 at time 4658.180791650136

_____

EVENT time: 4664.47114474929 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 4664.47114474929
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
In order ACK 11 Sent

_____

EVENT time: 4688.180791650136 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4688.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:

bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
Retransmitting Packet 11
startTimer: starting timer at 4688.180791650136
Starting timer for packet 11 at time 4688.180791650136

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EVENT time: 4718.180791650136 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4718.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 4718.180791650136
Starting timer for packet 11 at time 4718.180791650136

——————————————————————————————

EVENT time: 4726.721213415936 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 4726.721213415936
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK11 Sent

——————————————————————————————

EVENT time: 4748.180791650136 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4748.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 4748.180791650136
Starting timer for packet 11 at time 4748.180791650136

——————————————————————————————

EVENT time: 4753.020355845821 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 4753.020355845821
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side

Packet received is outside of window. ACK11 Sent
_____

EVENT time: 4759.869655446028 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 4759.869655446028
Recieved ACK for last sent packet. Stopping Timer at 4759.869655446028
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 4808.081301309244 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4808.081301309244
generateNextArrival(): future time for event 1 at entity 0 will be
4868.385876033814
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: packet being lost
startTimer: starting timer at 4808.081301309244
Packet: 12 With Payload: cccccccccccccccccccc sent to B
Timer started at: 4808.08
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 4838.081301309244 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4838.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 4838.081301309244
Starting timer for packet 12 at time 4838.081301309244

_____

EVENT time: 4846.016357921078 type: 2 entity: 1

bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 4846.016357921078
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____

EVENT time: 4868.081301309244 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4868.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 4868.081301309244
Starting timer for packet 12 at time 4868.081301309244

_____

EVENT time: 4868.385876033814 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4868.385876033814
generateNextArrival(): future time for event 1 at entity 0 will be
4922.171697134312
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2014 payload:
dddddddddddddddddddd
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 4868.385876033814
startTimer: starting timer at 4868.385876033814
Packet: 13 With Payload: dddddddddddddddddddd sent to B
Timer started at: 4868.39
Packet added to retransmission buffer at index [1]
Next sequence number: 14

_____

EVENT time: 4871.758476516006 type: 2 entity: 1
bInput() _____

Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 4873.55088961455 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 4898.385876033814 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4898.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
toLayer3: seqnum: 13 acknum: 0 checksum: -2014 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 4898.385876033814
Starting timer for packet 13 at time 4898.385876033814

_____

EVENT time: 4907.840113528855 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 4907.840113528855
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 4909.747337260048 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 4909.747337260048
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

```
EVENT time: 4919.4589373455  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Cumulative ACK 13received
stopTimer: stopping timer at 4919.4589373455
Recieved ACK for last sent packet. Stopping Timer at 4919.4589373455
Sliding window 2 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 4922.171697134312  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 4922.171697134312
generateNextArrival(): future time for event 1 at entity 0 will be
5148.081911679434
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2035  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 4922.171697134312
Packet: 14 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 4922.17
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 4923.730643635365  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 4923.730643635365
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 15      rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 4924.968779564806  type: 2  entity: 0
aInput()_____
```

Current Send_Base: 14   Send_end: 5
Received Corrupted ACK
Number of Corruped Packets to A: 3.0
_____

EVENT time: 4952.171697134312 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4952.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 4952.171697134312
Starting timer for packet 14 at time 4952.171697134312

_____

EVENT time: 4955.495925778985 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 4955.495925778985
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 4961.760460219123 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Received Corrupted ACK
Number of Corruped Packets to A: 4.0

_____

EVENT time: 4982.171697134312 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 4982.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 4982.171697134312
Starting timer for packet 14 at time 4982.171697134312

_____

```
EVENT time: 4986.169133579516  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 15       rcv_end: 6
Packet received is not corrupt. At time 4986.169133579516
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____


EVENT time: 4988.400738547929  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 4988.400738547929
Recieved ACK for last sent packet. Stopping Timer at 4988.400738547929
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 5148.081911679434  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 5148.081911679434
generateNextArrival(): future time for event 1 at entity 0 will be
5341.752372814112
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2056  payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 5148.081911679434
Packet: 15 With Payload: ffffffffffffffffff sent to B
Timer started at: 5148.08
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____


EVENT time: 5152.1993774224065  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15       rcv_end: 6
Packet received is not corrupt. At time 5152.1993774224065
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 0      rcv_end = 7
```

toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 5161.553636280404 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 5161.553636280404
Recieved ACK for last sent packet. Stopping Timer at 5161.553636280404
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 5341.752372814112 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 5341.752372814112
generateNextArrival(): future time for event 1 at entity 0 will be
5631.238746299631
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2061 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 5341.752372814112
Packet: 0 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 5341.75
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 5343.521439252908 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 5343.521439252908
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: packet being lost
In order ACK 0 Sent
_____

```
EVENT time: 5371.752372814112  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 5371.75
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: -2061  payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 5371.752372814112
Starting timer for packet 0 at time 5371.752372814112

_____


EVENT time: 5375.81600390637  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1       rcv_end: 8
Packet received is not corrupt. At time 5375.81600390637
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____


EVENT time: 5385.146641438033  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 5385.146641438033
Recieved ACK for last sent packet. Stopping Timer at 5385.146641438033
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 5631.238746299631  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 5631.238746299631
generateNextArrival(): future time for event 1 at entity 0 will be
5999.414044618061
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2082  payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 5631.238746299631
Packet: 1 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
```

Timer started at: 5631.24
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 5641.149204992828 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 5641.149204992828
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 5645.437513351848 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 5645.437513351848
Recieved ACK for last sent packet. Stopping Timer at 5645.437513351848
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 5999.414044618061 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 5999.414044618061
generateNextArrival(): future time for event 1 at entity 0 will be
6375.267799920652
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2103 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 5999.414044618061
Packet: 2 With Payload: iiiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 5999.41
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 6006.390514847255 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 6029.414044618061 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 6029.41
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2103 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 6029.414044618061
Starting timer for packet 2 at time 6029.414044618061

_____

EVENT time: 6031.375377666554 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 6031.375377666554
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 6039.0618610187075 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 6039.0618610187075
Recieved ACK for last sent packet. Stopping Timer at
6039.0618610187075
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 6375.267799920652 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 6375.267799920652
generateNextArrival(): future time for event 1 at entity 0 will be
6401.83111056856
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 6375.267799920652
Packet: 3 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 6375.27
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 6377.1549729911185 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 6377.1549729911185
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 6379.624713888973 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 6379.624713888973
Recieved ACK for last sent packet. Stopping Timer at 6379.624713888973
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 6401.83111056856 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 6401.83111056856
generateNextArrival(): future time for event 1 at entity 0 will be
6720.578630939664
aOutput()_____
Send_Base: 4 Send_end: 11

NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 6401.83111056856
Packet: 4 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 6401.83
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 6404.401379436628 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 6404.401379436628
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent
_____

EVENT time: 6431.83111056856 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 6431.83
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 6431.83111056856
Starting timer for packet 4 at time 6431.83111056856
_____

EVENT time: 6438.241218298898 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 6438.241218298898
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent
_____

EVENT time: 6445.409955137791 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 6445.409955137791
Recieved ACK for last sent packet. Stopping Timer at 6445.409955137791
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 6720.578630939664  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 6720.578630939664
generateNextArrival(): future time for event 1 at entity 0 will be
7088.644062623981
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2166  payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 6720.578630939664
Packet: 5 With Payload: lllllllllllllllllll sent to B
Timer started at: 6720.58
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____


EVENT time: 6728.749900814843  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 6728.749900814843
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 6736.11584826197  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 6736.11584826197
Recieved ACK for last sent packet. Stopping Timer at 6736.11584826197
```

Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 7088.644062623981 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 7088.644062623981
generateNextArrival(): future time for event 1 at entity 0 will be
7473.6655781731615
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 7088.644062623981
Packet: 6 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 7088.64
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 7091.164891506698 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 7091.164891506698
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 7100.174718466749 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Received Corrupted ACK
Number of Corruped Packets to A: 5.0
_____

EVENT time: 7118.644062623981 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 7118.64
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 7118.644062623981
Starting timer for packet 6 at time 7118.644062623981

_____

EVENT time: 7123.66682943205 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 7123.66682943205
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 7130.664448988311 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 7130.664448988311
Recieved ACK for last sent packet. Stopping Timer at 7130.664448988311
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 7473.6655781731615 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 7473.6655781731615
generateNextArrival(): future time for event 1 at entity 0 will be
7763.945432905057
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 7473.6655781731615
Packet: 7 With Payload: nnnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 7473.67
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 7477.997283852656 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 7477.997283852656
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 7481.189672536393 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 6.0

_____

EVENT time: 7503.6655781731615 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 7503.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2208 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 7503.6655781731615
Starting timer for packet 7 at time 7503.6655781731615

_____

EVENT time: 7513.048127689443 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 7513.048127689443
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 7517.81188390759 type: 2 entity: 0
aInput()_____

```
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 7517.81188390759
Recieved ACK for last sent packet. Stopping Timer at 7517.81188390759
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 7763.945432905057  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 7763.945432905057
generateNextArrival(): future time for event 1 at entity 0 will be
8160.869167149876
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2229  payload:
oooooooooooooooooooooo
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 7763.945432905057
Packet: 8 With Payload: oooooooooooooooooooooo sent to B
Timer started at: 7763.95
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____


EVENT time: 7769.910580767235  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8        rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 7793.945432905057  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 7793.95
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2229  payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 7793.945432905057
Starting timer for packet 8 at time 7793.945432905057
_____
```

```
EVENT time: 7801.069124423963  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8        rcv_end: 15
Packet received is not corrupt. At time 7801.069124423963
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 7805.197851496933  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 7805.197851496933
Recieved ACK for last sent packet. Stopping Timer at 7805.197851496933
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 8160.869167149876  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8160.869167149876
generateNextArrival(): future time for event 1 at entity 0 will be
8342.442091128269
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2250  payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 8160.869167149876
Packet: 9 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 8160.87
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____


EVENT time: 8163.330393383587  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9        rcv_end: 0
Packet received is not corrupt. At time 8163.330393383587
```

Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 8170.233252967925 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 8170.233252967925
Recieved ACK for last sent packet. Stopping Timer at 8170.233252967925
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 8342.442091128269 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8342.442091128269
generateNextArrival(): future time for event 1 at entity 0 will be
8360.093997009186
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 8342.442091128269
Packet: 10 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 8342.44
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 8349.058748130741 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 8349.058748130741
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side

In order ACK 10 Sent
_____

EVENT time: 8355.42573320719 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 8355.42573320719
Recieved ACK for last sent packet. Stopping Timer at 8355.42573320719
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 8360.093997009186 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8360.093997009186
generateNextArrival(): future time for event 1 at entity 0 will be
8524.21033356731
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
startTimer: starting timer at 8360.093997009186
Packet: 11 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 8360.09
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 8390.093997009186 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8390.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 8390.093997009186
Starting timer for packet 11 at time 8390.093997009186

_____

EVENT time: 8397.685171056246 type: 2 entity: 1

```
bInput() _____
Packet 11 received. rcv_base: 11        rcv_end: 2
Packet received is not corrupt. At time 8397.685171056246
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message rrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 8399.180120242927  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 8399.180120242927
Recieved ACK for last sent packet. Stopping Timer at 8399.180120242927
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 8524.21033356731  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8524.21033356731
generateNextArrival(): future time for event 1 at entity 0 will be
8772.276985992004
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2313  payload:
ssssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 8524.21033356731
Packet: 12 With Payload: ssssssssssssssssssss sent to B
Timer started at: 8524.21
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 8527.410138248848  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12        rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet

_____
```

EVENT time: 8554.21033356731 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8554.21
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2313 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 8554.21033356731
Starting timer for packet 12 at time 8554.21033356731

_____

EVENT time: 8559.037812433242 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 8559.037812433242
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 8562.177465132605 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 8562.177465132605
Recieved ACK for last sent packet. Stopping Timer at 8562.177465132605
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 8772.276985992004 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8772.276985992004
generateNextArrival(): future time for event 1 at entity 0 will be
8879.384746848964
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:

tttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 8772.276985992004
Packet: 13 With Payload: tttttttttttttttttttt sent to B
Timer started at: 8772.28
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 8802.276985992004 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8802.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:
tttttttttttttttttttt
toLayer3: packet being lost
Retransmitting Packet 13
startTimer: starting timer at 8802.276985992004
Starting timer for packet 13 at time 8802.276985992004

_____

EVENT time: 8832.276985992004 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8832.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 8832.276985992004
Starting timer for packet 13 at time 8832.276985992004

_____

EVENT time: 8834.548966948454 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 8834.548966948454
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 8836.477065340128 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 13    Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 8836.477065340128
Recieved ACK for last sent packet. Stopping Timer at 8836.477065340128
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 8879.384746848964  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 8879.384746848964
generateNextArrival(): future time for event 1 at entity 0 will be
9039.887691885127
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2355  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 8879.384746848964
Packet: 14 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 8879.38
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 8887.936704611348  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 8887.936704611348
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 15      rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 8893.594225898009  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Received Corrupted ACK
Number of Corruped Packets to A: 7.0
```

_____

EVENT time: 8909.384746848964 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8909.38
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 8909.384746848964
Starting timer for packet 14 at time 8909.384746848964

_____

EVENT time: 8912.78862880337 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 8912.78862880337
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 8939.384746848964 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 8939.38
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 8939.384746848964
Starting timer for packet 14 at time 8939.384746848964

_____

EVENT time: 8948.540421765802 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 8948.540421765802
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 8951.499618518632 type: 2 entity: 0

aInput()_____

Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 8951.499618518632
Recieved ACK for last sent packet. Stopping Timer at 8951.499618518632
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 9039.887691885127 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9039.887691885127
generateNextArrival(): future time for event 1 at entity 0 will be
9299.343852046266
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2376 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9039.887691885127
Packet: 15 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 9039.89
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 9048.736289559616 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 9048.736289559616
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 9050.883022553176 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 9050.883022553176
Recieved ACK for last sent packet. Stopping Timer at 9050.883022553176

Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 9299.343852046266 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9299.343852046266
generateNextArrival(): future time for event 1 at entity 0 will be
9415.851313821833
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2381 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9299.343852046266
Packet: 0 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 9299.34
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 9305.591357158117 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 9305.591357158117
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 9315.480941190832 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 9315.480941190832
Recieved ACK for last sent packet. Stopping Timer at 9315.480941190832
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

```
EVENT time: 9415.851313821833  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9415.851313821833
generateNextArrival(): future time for event 1 at entity 0 will be
9466.585283974731
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2402  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9415.851313821833
Packet: 1 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 9415.85
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____


EVENT time: 9417.24463637196  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1       rcv_end: 8
Packet received is not corrupt. At time 9417.24463637196
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: packet being lost
In order ACK 1 Sent

_____


EVENT time: 9445.851313821833  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 9445.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1  acknum: 0  checksum: -2402  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 9445.851313821833
Starting timer for packet 1 at time 9445.851313821833

_____


EVENT time: 9448.47871333964  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 2       rcv_end: 9
```

Packet received is not corrupt. At time 9448.47871333964
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent
_____

EVENT time: 9453.173802911466 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 9453.173802911466
Recieved ACK for last sent packet. Stopping Timer at 9453.173802911466
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 9466.585283974731 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9466.585283974731
generateNextArrival(): future time for event 1 at entity 0 will be
9596.508682515947
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9466.585283974731
Packet: 2 With Payload: yyyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 9466.59
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 9469.294808801538 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 9469.294808801538
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message yyyyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

```
EVENT time: 9478.519425031282  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 9478.519425031282
Recieved ACK for last sent packet. Stopping Timer at 9478.519425031282
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 9596.508682515947  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9596.508682515947
generateNextArrival(): future time for event 1 at entity 0 will be
9623.596911526842
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2444  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9596.508682515947
Packet: 3 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 9596.51
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 9599.311868648336  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3       rcv_end: 10
Packet received is not corrupt. At time 9599.311868648336
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 4      rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____


EVENT time: 9623.596911526842  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9623.596911526842
```

generateNextArrival(): future time for event 1 at entity 0 will be
9819.196142460403
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 9623.596911526842
startTimer: starting timer at 9623.596911526842
Packet: 4 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 9623.60
Packet added to retransmission buffer at index [1]
Next sequence number: 5
_____

EVENT time: 9628.201086458937 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 9628.201086458937
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 9636.289956358532 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Cumulative ACK 4received
stopTimer: stopping timer at 9636.289956358532
Recieved ACK for last sent packet. Stopping Timer at 9636.289956358532
Sliding window 2 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 9819.196142460403 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 9819.196142460403
generateNextArrival(): future time for event 1 at entity 0 will be
10194.647053437911
aOutput()_____
Send_Base: 5 Send_end: 12

NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -1966 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 9819.196142460403
Packet: 5 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 9819.20
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 9828.165593432417 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 9828.165593432417
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 9834.108218634603 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 9834.108218634603
Recieved ACK for last sent packet. Stopping Timer at 9834.108218634603
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 10194.647053437911 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 10194.647053437911
generateNextArrival(): future time for event 1 at entity 0 will be
10251.106295968506
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1987 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side

startTimer: starting timer at 10194.647053437911
Packet: 6 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 10194.65
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 10201.67159031953 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 10201.67159031953
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message cccccccccccccccccccccc delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 10203.195928830837 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 10203.195928830837
Recieved ACK for last sent packet. Stopping Timer at
10203.195928830837
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 10251.106295968506 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 10251.106295968506
generateNextArrival(): future time for event 1 at entity 0 will be
10446.19281594287
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 10251.106295968506
Packet: 7 With Payload: dddddddddddddddddddd sent to B
Timer started at: 10251.11
Packet added to retransmission buffer at index [0]

Next sequence number: 8
_____

EVENT time: 10255.890377513962 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 10255.890377513962
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 10281.106295968506 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 10281.11
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 10281.106295968506
Starting timer for packet 7 at time 10281.106295968506

_____

EVENT time: 10284.580492568744 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 10284.580492568744
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 10311.106295968506 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 10311.11
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 10311.106295968506
Starting timer for packet 7 at time 10311.106295968506

_____

EVENT time: 10312.196935941649 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 10312.196935941649
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 10321.417432172613 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 10321.417432172613
Recieved ACK for last sent packet. Stopping Timer at
10321.417432172613
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 10446.19281594287 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 10446.19281594287
generateNextArrival(): future time for event 1 at entity 0 will be
10823.54808191168
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 10446.19281594287
Packet: 8 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 10446.19
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 10453.486526078066 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15

Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 10476.19281594287 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 10476.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 10476.19281594287
Starting timer for packet 8 at time 10476.19281594287

_____

EVENT time: 10482.734214300974 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 10482.734214300974
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 10487.176061281167 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 10487.176061281167
Recieved ACK for last sent packet. Stopping Timer at
10487.176061281167
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 10823.54808191168 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 10823.54808191168
generateNextArrival(): future time for event 1 at entity 0 will be
10973.015533921323
aOutput()_____
Send_Base: 9 Send_end: 0

NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 10823.54808191168
Packet: 9 With Payload: ffffffffffffffffffff sent to B
Timer started at: 10823.55
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 10828.95455793939 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 10828.95455793939
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 10837.812219611194 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Received Corrupted ACK
Number of Corruped Packets to A: 8.0
_____

EVENT time: 10853.54808191168 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 10853.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 9
startTimer: starting timer at 10853.54808191168
Starting timer for packet 9 at time 10853.54808191168
_____

EVENT time: 10883.54808191168 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 10883.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 10883.54808191168
Starting timer for packet 9 at time 10883.54808191168

_____

EVENT time: 10884.65932187872 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 10884.65932187872
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 10890.548936429945 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 10890.548936429945
Recieved ACK for last sent packet. Stopping Timer at
10890.548936429945
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 10973.015533921323 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 10973.015533921323
generateNextArrival(): future time for event 1 at entity 0 will be
11157.213049714652
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2071 payload:
gggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 10973.015533921323
Packet: 10 With Payload: gggggggggggggggggggg sent to B
Timer started at: 10973.02

Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 10981.713064973907 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 11003.015533921323 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 11003.02
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2071 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 11003.015533921323
Starting timer for packet 10 at time 11003.015533921323

_____

EVENT time: 11011.898190252388 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 11011.898190252388
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 11014.878536332286 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 11014.878536332286
Recieved ACK for last sent packet. Stopping Timer at
11014.878536332286
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 11157.213049714652 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 11157.213049714652
generateNextArrival(): future time for event 1 at entity 0 will be
11281.789605395672
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2092 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 11157.213049714652
Packet: 11 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 11157.21
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 11163.014770958585 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 11163.014770958585
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 11165.595202490309 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 11165.595202490309
Recieved ACK for last sent packet. Stopping Timer at
11165.595202490309
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 11281.789605395672 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 11281.789605395672

generateNextArrival(): future time for event 1 at entity 0 will be
11342.61909848323
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2113 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 11281.789605395672
Packet: 12 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 11281.79
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 11285.18634601886 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 11285.18634601886
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 11291.706595049896 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 11291.706595049896
Recieved ACK for last sent packet. Stopping Timer at
11291.706595049896
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 11342.61909848323 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 11342.61909848323
generateNextArrival(): future time for event 1 at entity 0 will be
11524.05774101993
aOutput()_____
Send_Base: 13 Send_end: 4

NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 11342.61909848323
Packet: 13 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 11342.62
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 11345.793359172338 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 11345.793359172338
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 11348.422956022827 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 11348.422956022827
Recieved ACK for last sent packet. Stopping Timer at
11348.422956022827
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 11524.05774101993 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 11524.05774101993
generateNextArrival(): future time for event 1 at entity 0 will be
11846.516312143316
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2155 payload:
kkkkkkkkkkkkkkkkkkkk

```
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 11524.05774101993
Packet: 14 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 11524.06
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 11525.664754173407  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14      rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 11554.05774101993  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 11554.06
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14  acknum: 0  checksum: -2155  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 11554.05774101993
Starting timer for packet 14 at time 11554.05774101993

_____


EVENT time: 11557.56324961089  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14      rcv_end: 5
Packet received is not corrupt. At time 11557.56324961089
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 15     rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: packet being lost
In order ACK 14 Sent

_____


EVENT time: 11584.05774101993  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 11584.06
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14  acknum: 0  checksum: -2155  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
```

Retransmitting Packet 14
startTimer: starting timer at 11584.05774101993
Starting timer for packet 14 at time 11584.05774101993
_____

EVENT time: 11591.912320322277 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 11591.912320322277
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 11595.449415570545 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 11595.449415570545
Recieved ACK for last sent packet. Stopping Timer at
11595.449415570545
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 11846.516312143316 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 11846.516312143316
generateNextArrival(): future time for event 1 at entity 0 will be
12017.603076265756
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 11846.516312143316
Packet: 15 With Payload: lllllllllllllllllll sent to B
Timer started at: 11846.52
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 11848.174962614827 type: 2 entity: 1

```
bInput() _____
Packet 15 received. rcv_base: 15        rcv_end: 6
Packet received is not corrupt. At time 11848.174962614827
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 0      rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 11858.048615985595  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 11858.048615985595
Recieved ACK for last sent packet. Stopping Timer at
11858.048615985595
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 12017.603076265756  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12017.603076265756
generateNextArrival(): future time for event 1 at entity 0 will be
12374.29120761742
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2181  payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 12017.603076265756
Packet: 0 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 12017.60
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 12025.491988891263  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 12025.491988891263
Packet received is in order. Delivering packet(s) to layer5
```

Packet 0 Message mmmmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____

EVENT time: 12047.603076265756 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 12047.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2181 payload:
mmmmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 12047.603076265756
Starting timer for packet 0 at time 12047.603076265756

_____

EVENT time: 12050.15906247139 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 12050.15906247139
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 12056.472487563708 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 12056.472487563708
Recieved ACK for last sent packet. Stopping Timer at
12056.472487563708
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 12374.29120761742 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12374.29120761742
generateNextArrival(): future time for event 1 at entity 0 will be
12403.9429914243
aOutput()_____

Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2202 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 12374.29120761742
Packet: 1 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 12374.29
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 12381.041627246925 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 12381.041627246925
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 12387.503921628468 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 12387.503921628468
Recieved ACK for last sent packet. Stopping Timer at
12387.503921628468
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 12403.9429914243 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12403.9429914243
generateNextArrival(): future time for event 1 at entity 0 will be
12491.286965544603
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:

oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 12403.9429914243
Packet: 2 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 12403.94
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 12407.394390697958 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 12407.394390697958
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: packet being lost
In order ACK 2 Sent

_____

EVENT time: 12433.9429914243 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 12433.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2223 payload:
ooooooooooooooooooooo
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 12433.9429914243
Starting timer for packet 2 at time 12433.9429914243

_____

EVENT time: 12435.708487197486 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 12463.9429914243 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 12463.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2223 payload:
ooooooooooooooooooooo

toLayer3: packet being lost
Retransmitting Packet 2
startTimer: starting timer at 12463.9429914243
Starting timer for packet 2 at time 12463.9429914243

_____

EVENT time: 12491.286965544603 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12491.286965544603
generateNextArrival(): future time for event 1 at entity 0 will be
12629.999694814906
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 12491.286965544603
startTimer: starting timer at 12491.286965544603
Packet: 3 With Payload: pppppppppppppppppppp sent to B
Timer started at: 12491.29
Packet added to retransmission buffer at index [1]
Next sequence number: 4

_____

EVENT time: 12494.883938108464 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 12494.883938108464
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 12499.282387768182 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Cumulative ACK 3received
stopTimer: stopping timer at 12499.282387768182
Recieved ACK for last sent packet. Stopping Timer at
12499.282387768182
Sliding window 2 times
New send_base: 4 send_end: 11

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 12629.999694814906 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12629.999694814906
generateNextArrival(): future time for event 1 at entity 0 will be
12655.024872585223
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2265 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 12629.999694814906
Packet: 4 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 12630.00
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 12638.548356578265 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 12638.548356578265
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 12645.867336039308 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 12645.867336039308
Recieved ACK for last sent packet. Stopping Timer at
12645.867336039308
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 12655.024872585223 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 12655.024872585223
generateNextArrival(): future time for event 1 at entity 0 will be
13028.254036072878
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2286 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 12655.024872585223
Packet: 5 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 12655.02
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 12658.835535752434 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 12658.835535752434
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 12665.523880733665 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 12665.523880733665
Recieved ACK for last sent packet. Stopping Timer at
12665.523880733665
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 13028.254036072878 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 13028.254036072878
generateNextArrival(): future time for event 1 at entity 0 will be

13398.94405957213
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2307 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 13028.254036072878
Packet: 6 With Payload: sssssssssssssssssssss sent to B
Timer started at: 13028.25
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 13030.22937711722 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 13030.22937711722
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 13032.365672780541 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 13032.365672780541
Recieved ACK for last sent packet. Stopping Timer at
13032.365672780541
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 13398.94405957213 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 13398.94405957213
generateNextArrival(): future time for event 1 at entity 0 will be
13713.809625537888
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7

NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
ttttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 13398.94405957213
Packet: 7 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 13398.94
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 13428.94405957213 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 13428.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
ttttttttttttttttttttt
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 13428.94405957213
Starting timer for packet 7 at time 13428.94405957213

_____

EVENT time: 13458.94405957213 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 13458.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 13458.94405957213
Starting timer for packet 7 at time 13458.94405957213

_____

EVENT time: 13467.575670644244 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 13467.575670644244
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 13488.94405957213 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 13488.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
tttttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 13488.94405957213
Starting timer for packet 7 at time 13488.94405957213

_____

EVENT time: 13489.961638233588 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 13489.961638233588
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 13493.654744102298 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 13493.654744102298
Recieved ACK for last sent packet. Stopping Timer at
13493.654744102298
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 13713.809625537888 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 13713.809625537888
generateNextArrival(): future time for event 1 at entity 0 will be
13998.51069673757
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2349 payload:
uuuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 13713.809625537888

Packet: 8 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 13713.81
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 13721.594439527573 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 13721.594439527573
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 13723.288521988585 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 13723.288521988585
Recieved ACK for last sent packet. Stopping Timer at
13723.288521988585
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 13998.51069673757 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 13998.51069673757
generateNextArrival(): future time for event 1 at entity 0 will be
14330.735190893276
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2370 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 13998.51069673757
Packet: 9 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 13998.51
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 14003.271706289865 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 14003.271706289865
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 14011.677541428877 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 14011.677541428877
Recieved ACK for last sent packet. Stopping Timer at
14011.677541428877
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 14330.735190893276 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 14330.735190893276
generateNextArrival(): future time for event 1 at entity 0 will be
14604.43739127781
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2391 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 14330.735190893276
Packet: 10 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 14330.74
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 14337.53175450911 type: 2 entity: 1

bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 14337.53175450911
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message wwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 14342.601763969848 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 14342.601763969848
Recieved ACK for last sent packet. Stopping Timer at
14342.601763969848
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 14604.43739127781 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 14604.43739127781
generateNextArrival(): future time for event 1 at entity 0 will be
14777.440717795344
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2412 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 14604.43739127781
Packet: 11 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 14604.44
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 14606.849452192755 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 14606.849452192755
Packet received is in order. Delivering packet(s) to layer5

Packet 11 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
In order ACK 11 Sent
_____

EVENT time: 14634.43739127781 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 14634.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2412 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 14634.43739127781
Starting timer for packet 11 at time 14634.43739127781

_____

EVENT time: 14640.383037812433 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 14640.383037812433
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 14643.342783898433 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 14643.342783898433
Recieved ACK for last sent packet. Stopping Timer at
14643.342783898433
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 14777.440717795344 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 14777.440717795344
generateNextArrival(): future time for event 1 at entity 0 will be
15008.343760490738
aOutput()_____

Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 14777.440717795344
Packet: 12 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 14777.44
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 14782.584612567523 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 14807.440717795344 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 14807.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 14807.440717795344
Starting timer for packet 12 at time 14807.440717795344
_____

EVENT time: 14812.356364635152 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 14812.356364635152
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 14817.583483382672 type: 2 entity: 0
aInput()_____

Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 14817.583483382672
Recieved ACK for last sent packet. Stopping Timer at
14817.583483382672
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 15008.343760490738 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 15008.343760490738
generateNextArrival(): future time for event 1 at entity 0 will be
15333.060701315348
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2454 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 15008.343760490738
Packet: 13 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 15008.34
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 15010.905514694663 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 15010.905514694663
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 15012.073610644857 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 15012.073610644857
Recieved ACK for last sent packet. Stopping Timer at

15012.073610644857
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 15333.060701315348 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 15333.060701315348
generateNextArrival(): future time for event 1 at entity 0 will be
15676.23523667104
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1955 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 15333.060701315348
Packet: 14 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 15333.06
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 15340.937253944518 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 15340.937253944518
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 15347.29874568926 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 15347.29874568926
Recieved ACK for last sent packet. Stopping Timer at 15347.29874568926
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 15676.23523667104 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 15676.23523667104
generateNextArrival(): future time for event 1 at entity 0 will be
15706.936857203893
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 15676.23523667104
Packet: 15 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 15676.24
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 15682.538224433118 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 15682.538224433118
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 15684.375957518234 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 9.0

_____

EVENT time: 15706.23523667104 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 15706.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -1976 payload:
bbbbbbbbbbbbbbbbbbbb

```
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 15706.23523667104
Starting timer for packet 15 at time 15706.23523667104
_____


EVENT time: 15706.936857203893  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 15706.936857203893
generateNextArrival(): future time for event 1 at entity 0 will be
16106.045716727194
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -1981  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 15706.936857203893
startTimer: starting timer at 15706.936857203893
Packet: 0 With Payload: cccccccccccccccccccc sent to B
Timer started at: 15706.94
Packet added to retransmission buffer at index [1]
Next sequence number: 1
_____


EVENT time: 15714.342234565263  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 0       rcv_end: 7
Packet received is not corrupt. At time 15714.342234565263
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent
_____


EVENT time: 15719.371868037964  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0       rcv_end: 7
Packet received is not corrupt. At time 15719.371868037964
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 1      rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____
```

EVENT time: 15721.438734092226 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 15728.171025727102 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 15728.171025727102
Recieved ACK for last sent packet. Stopping Timer at
15728.171025727102
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 16106.045716727194 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 16106.045716727194
generateNextArrival(): future time for event 1 at entity 0 will be
16154.033021027251
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2002 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 16106.045716727194
Packet: 1 With Payload: dddddddddddddddddddd sent to B
Timer started at: 16106.05
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 16114.532578508864 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 16114.532578508864
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message dddddddddddddddddddd delivered to Layer 5

New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 16124.234290597245 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 16124.234290597245
Recieved ACK for last sent packet. Stopping Timer at
16124.234290597245
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 16154.033021027251 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 16154.033021027251
generateNextArrival(): future time for event 1 at entity 0 will be
16501.32145146031
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2023 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 16154.033021027251
Packet: 2 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 16154.03
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 16156.51237525559 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 16156.51237525559
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 16161.476088747822 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 16161.476088747822
Recieved ACK for last sent packet. Stopping Timer at
16161.476088747822
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 16501.32145146031 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 16501.32145146031
generateNextArrival(): future time for event 1 at entity 0 will be
16852.198858607746
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2044 payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 16501.32145146031
Packet: 3 With Payload: ffffffffffffffffff sent to B
Timer started at: 16501.32
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 16509.922299874874 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 16509.922299874874
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 16512.72493667409 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 16512.72493667409
Recieved ACK for last sent packet. Stopping Timer at 16512.72493667409
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 16852.198858607746  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 16852.198858607746
generateNextArrival(): future time for event 1 at entity 0 will be
17064.546647541734
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -2065  payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 16852.198858607746
Packet: 4 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 16852.20
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____


EVENT time: 16860.04547257912  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4       rcv_end: 11
Packet received is not corrupt. At time 16860.04547257912
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 5     rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____


EVENT time: 16869.926267281106  type: 2  entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 16869.926267281106
Recieved ACK for last sent packet. Stopping Timer at
```

16869.926267281106
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 17064.546647541734 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17064.546647541734
generateNextArrival(): future time for event 1 at entity 0 will be
17235.999633777887
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2086 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 17064.546647541734
Packet: 5 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 17064.55
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 17065.67326883755 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 17065.67326883755
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 17072.08667256691 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 17072.08667256691
Recieved ACK for last sent packet. Stopping Timer at 17072.08667256691
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 17235.999633777887 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17235.999633777887
generateNextArrival(): future time for event 1 at entity 0 will be
17264.967802972504
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 17235.999633777887
Packet: 6 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 17236.00
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 17243.23071993164 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 17243.23071993164
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 17252.397656178473 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Received Corrupted ACK
Number of Corruped Packets to A: 10.0
_____

EVENT time: 17264.967802972504 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17264.967802972504
generateNextArrival(): future time for event 1 at entity 0 will be
17638.23358867153
aOutput()_____

Send_Base: 6 Send_end: 13
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2128 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 17264.967802972504
startTimer: starting timer at 17264.967802972504
Packet: 7 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 17264.97
Packet added to retransmission buffer at index [1]
Next sequence number: 8
_____

EVENT time: 17272.405713064974 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 17272.405713064974
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 17276.00817896054 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Cumulative ACK 7received
stopTimer: stopping timer at 17276.00817896054
Recieved ACK for last sent packet. Stopping Timer at 17276.00817896054
Sliding window 2 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 17638.23358867153 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17638.23358867153
generateNextArrival(): future time for event 1 at entity 0 will be
17688.10083315531
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2149 payload:

kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 17638.23358867153
Packet: 8 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 17638.23
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 17646.082399975585 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 17646.082399975585
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 17648.26209295938 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 17648.26209295938
Recieved ACK for last sent packet. Stopping Timer at 17648.26209295938
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 17688.10083315531 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17688.10083315531
generateNextArrival(): future time for event 1 at entity 0 will be
17816.827906125065
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2170 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 17688.10083315531
Packet: 9 With Payload: llllllllllllllllllll sent to B
Timer started at: 17688.10

Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 17689.49278237251 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 17689.49278237251
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____

EVENT time: 17718.10083315531 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 17718.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2170 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 17718.10083315531
Starting timer for packet 9 at time 17718.10083315531

_____

EVENT time: 17720.085238196967 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 17720.085238196967
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 17729.208502456742 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 17729.208502456742
Recieved ACK for last sent packet. Stopping Timer at
17729.208502456742
Sliding window 1 times
New send_base: 10 send_end: 1

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 17816.827906125065 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 17816.827906125065
generateNextArrival(): future time for event 1 at entity 0 will be
18090.81087679678
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 17816.827906125065
Packet: 10 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 17816.83
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 17820.703115939818 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 17846.827906125065 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 17846.83
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 17846.827906125065
Starting timer for packet 10 at time 17846.827906125065

_____

EVENT time: 17853.602496414074 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 17853.602496414074
Packet received is in order. Delivering packet(s) to layer5

Packet 10 Message mmmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 17862.197027497175 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 17862.197027497175
Recieved ACK for last sent packet. Stopping Timer at
17862.197027497175
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 18090.81087679678 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 18090.81087679678
generateNextArrival(): future time for event 1 at entity 0 will be
18454.860072634056
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2212 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 18090.81087679678
Packet: 11 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 18090.81
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 18098.225165562915 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 18098.225165562915
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side

In order ACK 11 Sent
_____

EVENT time: 18105.38209173864 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 18105.38209173864
Recieved ACK for last sent packet. Stopping Timer at 18105.38209173864
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 18454.860072634056 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 18454.860072634056
generateNextArrival(): future time for event 1 at entity 0 will be
18528.971221045565
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2233 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 18454.860072634056
Packet: 12 With Payload: oooooooooooooooooooo sent to B
Timer started at: 18454.86
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 18456.225379192485 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 18456.225379192485
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 18460.900967436755 type: 2 entity: 0

aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 18460.900967436755
Recieved ACK for last sent packet. Stopping Timer at
18460.900967436755
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 18528.971221045565 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 18528.971221045565
generateNextArrival(): future time for event 1 at entity 0 will be
18725.57145908994
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2254 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 18528.971221045565
Packet: 13 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 18528.97
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 18538.135959959716 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 18538.135959959716
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 18546.13528855251 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 18546.13528855251

Recieved ACK for last sent packet. Stopping Timer at 18546.13528855251
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 18725.57145908994 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 18725.57145908994
generateNextArrival(): future time for event 1 at entity 0 will be
19056.92922757653
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2275 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 18725.57145908994
Packet: 14 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 18725.57
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 18728.667989135414 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 18728.667989135414
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 18733.140324106575 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 18733.140324106575
Recieved ACK for last sent packet. Stopping Timer at
18733.140324106575
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 19056.92922757653 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 19056.92922757653
generateNextArrival(): future time for event 1 at entity 0 will be
19427.8511917478
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −2296 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 19056.92922757653
Packet: 15 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 19056.93
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 19059.616229743344 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 19059.616229743344
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 19063.802087466054 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 19063.802087466054
Recieved ACK for last sent packet. Stopping Timer at
19063.802087466054
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 19427.8511917478 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 19427.8511917478
generateNextArrival(): future time for event 1 at entity 0 will be
19581.79876094852
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2301  payload:
sssssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 19427.8511917478
Packet: 0 With Payload: sssssssssssssssssssss sent to B
Timer started at: 19427.85
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____


EVENT time: 19435.122104556416  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0       rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 19457.8511917478  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 19457.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: -2301  payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 19457.8511917478
Starting timer for packet 0 at time 19457.8511917478
_____


EVENT time: 19465.475325785093  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0       rcv_end: 7
Packet received is not corrupt. At time 19465.475325785093
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
```

In order ACK 0 Sent
_____

EVENT time: 19470.780999176004 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 11.0

_____

EVENT time: 19487.8511917478 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 19487.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 19487.8511917478
Starting timer for packet 0 at time 19487.8511917478

_____

EVENT time: 19496.8563493759 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 19496.8563493759
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 19503.166203802608 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 19503.166203802608
Recieved ACK for last sent packet. Stopping Timer at
19503.166203802608
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 19581.79876094852 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 19581.79876094852
generateNextArrival(): future time for event 1 at entity 0 will be
19829.804376354263
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2322 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 19581.79876094852
Packet: 1 With Payload: tttttttttttttttttttt sent to B
Timer started at: 19581.80
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 19583.04870754113 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 19583.04870754113
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 19584.126438184765 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 19584.126438184765
Recieved ACK for last sent packet. Stopping Timer at
19584.126438184765
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 19829.804376354263 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 19829.804376354263
generateNextArrival(): future time for event 1 at entity 0 will be
19953.526413769956
aOutput()_____

Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 19829.804376354263
Packet: 2 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 19829.80
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 19838.554368724635 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 19838.554368724635
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 19842.554277169107 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 19842.554277169107
Recieved ACK for last sent packet. Stopping Timer at
19842.554277169107
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 19953.526413769956 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 19953.526413769956
generateNextArrival(): future time for event 1 at entity 0 will be
20124.515518662072
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2364 payload:

vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 19953.526413769956
Packet: 3 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 19953.53
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 19954.851344340346 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 19954.851344340346
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 19957.65837580493 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 19957.65837580493
Recieved ACK for last sent packet. Stopping Timer at 19957.65837580493
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 20124.515518662072 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 20124.515518662072
generateNextArrival(): future time for event 1 at entity 0 will be
20345.982238227487
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 20124.515518662072
Packet: 4 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 20124.52

Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 20128.87908566546 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 20128.87908566546
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 20154.515518662072 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20154.52
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
Retransmitting Packet 4
startTimer: starting timer at 20154.515518662072
Starting timer for packet 4 at time 20154.515518662072

_____

EVENT time: 20184.515518662072 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20184.52
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 20184.515518662072
Starting timer for packet 4 at time 20184.515518662072

_____

EVENT time: 20188.220435193947 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 20188.220435193947
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side

Packet received is outside of window. ACK4 Sent
_____

EVENT time: 20189.65111239967 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 20189.65111239967
Recieved ACK for last sent packet. Stopping Timer at 20189.65111239967
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 20345.982238227487 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 20345.982238227487
generateNextArrival(): future time for event 1 at entity 0 will be
20512.85744804224
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2406 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being lost
startTimer: starting timer at 20345.982238227487
Packet: 5 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 20345.98
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 20375.982238227487 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20375.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: −2406 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 20375.982238227487
Starting timer for packet 5 at time 20375.982238227487

_____

EVENT time: 20384.554521317183 type: 2 entity: 1

bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 20384.554521317183
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 20387.631275368516 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 20387.631275368516
Recieved ACK for last sent packet. Stopping Timer at
20387.631275368516
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 20512.85744804224 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 20512.85744804224
generateNextArrival(): future time for event 1 at entity 0 will be
20597.833185827207
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 20512.85744804224
Packet: 6 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 20512.86
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 20521.37177648244 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 20521.37177648244
Packet received is in order. Delivering packet(s) to layer5

Packet 6 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being lost
In order ACK 6 Sent

_____

EVENT time: 20542.85744804224 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20542.86
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being lost
Retransmitting Packet 6
startTimer: starting timer at 20542.85744804224
Starting timer for packet 6 at time 20542.85744804224

_____

EVENT time: 20572.85744804224 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20572.86
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 20572.85744804224
Starting timer for packet 6 at time 20572.85744804224

_____

EVENT time: 20580.344798120062 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 20580.344798120062
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 20585.832026123848 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 20585.832026123848
Recieved ACK for last sent packet. Stopping Timer at

20585.832026123848
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 20597.833185827207 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 20597.833185827207
generateNextArrival(): future time for event 1 at entity 0 will be
20697.164830469683
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2448 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 20597.833185827207
Packet: 7 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 20597.83
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 20599.20920438246 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 20599.20920438246
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 20603.005584887236 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 20603.005584887236
Recieved ACK for last sent packet. Stopping Timer at
20603.005584887236
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 20697.164830469683 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 20697.164830469683
generateNextArrival(): future time for event 1 at entity 0 will be
20897.036652729883
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −1949 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 20697.164830469683
Packet: 8 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 20697.16
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 20705.71349223304 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 20705.71349223304
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 20712.62788781396 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 20712.62788781396
Recieved ACK for last sent packet. Stopping Timer at 20712.62788781396
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 20897.036652729883 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 20897.036652729883
generateNextArrival(): future time for event 1 at entity 0 will be
21209.179967650383
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 20897.036652729883
Packet: 9 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 20897.04
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 20902.18933683279 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 20902.18933683279
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 20907.312631611076 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Received Corrupted ACK
Number of Corruped Packets to A: 12.0

_____

EVENT time: 20927.036652729883 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 20927.04
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: −1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 20927.036652729883
Starting timer for packet 9 at time 20927.036652729883

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EVENT time: 20935.29938657796 type: 2 entity: 1
bInput() ———————————————————————
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 20935.29938657796
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

———————————————————————

EVENT time: 20941.143131809444 type: 2 entity: 0
aInput()———————————————————————
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 20941.143131809444
Recieved ACK for last sent packet. Stopping Timer at
20941.143131809444
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

———————————————————————

EVENT time: 21209.179967650383 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 21209.179967650383
generateNextArrival(): future time for event 1 at entity 0 will be
21571.898556474505
aOutput()———————————————————————
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −1991 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 21209.179967650383
Packet: 10 With Payload: cccccccccccccccccccc sent to B
Timer started at: 21209.18
Packet added to retransmission buffer at index [0]
Next sequence number: 11

———————————————————————

EVENT time: 21211.55165257729 type: 2 entity: 1
bInput() ———————————————————————
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 21211.55165257729

Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 21218.590472121345 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 21218.590472121345
Recieved ACK for last sent packet. Stopping Timer at
21218.590472121345
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 21571.898556474505 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 21571.898556474505
generateNextArrival(): future time for event 1 at entity 0 will be
21817.26737266152
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 21571.898556474505
Packet: 11 With Payload: dddddddddddddddddddd sent to B
Timer started at: 21571.90
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 21574.985747856077 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 21574.985747856077
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:

toLayer3: scheduling arrival on other side
In order ACK 11 Sent

—————————————————————

EVENT time: 21576.65126499222 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 21576.65126499222
Recieved ACK for last sent packet. Stopping Timer at 21576.65126499222
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

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EVENT time: 21817.26737266152 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 21817.26737266152
generateNextArrival(): future time for event 1 at entity 0 will be
21857.185583056125
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2033 payload:
eeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 21817.26737266152
Packet: 12 With Payload: eeeeeeeeeeeeeeeeeee sent to B
Timer started at: 21817.27
Packet added to retransmission buffer at index [0]
Next sequence number: 13

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EVENT time: 21823.374248481705 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 21823.374248481705
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message eeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

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EVENT time: 21829.010345774714  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 21829.010345774714
Recieved ACK for last sent packet. Stopping Timer at
21829.010345774714
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 21857.185583056125  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 21857.185583056125
generateNextArrival(): future time for event 1 at entity 0 will be
22075.649281289105
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2054  payload:
ffffffffffffffffff
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 21857.185583056125
Packet: 13 With Payload: ffffffffffffffffff sent to B
Timer started at: 21857.19
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 21862.038880581073  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 21887.185583056125  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 21887.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2054  payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 21887.185583056125
```

Starting timer for packet 13 at time 21887.185583056125
_____

EVENT time: 21888.23310037538   type: 2   entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 21888.23310037538
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 21890.51606799524   type: 2   entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 13.0

_____

EVENT time: 21917.185583056125   type: 0   entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 21917.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 21917.185583056125
Starting timer for packet 13 at time 21917.185583056125

_____

EVENT time: 21919.600665303507   type: 2   entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 21919.600665303507
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 21922.37446211127   type: 2   entity: 0

aInput()_____

Current Send_Base: 13   Send_end: 4

Expected ACK 13 received

stopTimer: stopping timer at 21922.37446211127

Recieved ACK for last sent packet. Stopping Timer at 21922.37446211127

Sliding window 1 times

New send_base: 14 send_end: 5

Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 22075.649281289105 type: 1 entity: 0

generateNextArrival(): called

generateNextArrival(): time is 22075.649281289105

generateNextArrival(): future time for event 1 at entity 0 will be
22298.739585558644

aOutput()_____

Send_Base: 14 Send_end: 5

NextSeqNo: 14

NextSeqNo is in send window

toLayer3: seqnum: 14 acknum: 0 checksum: -2075 payload:
ggggggggggggggggggggg

toLayer3: scheduling arrival on other side

startTimer: starting timer at 22075.649281289105

Packet: 14 With Payload: ggggggggggggggggggggg sent to B

Timer started at: 22075.65

Packet added to retransmission buffer at index [0]

Next sequence number: 15

_____

EVENT time: 22081.788018433184 type: 2 entity: 1

bInput() _____

Packet 14 received. rcv_base: 14   rcv_end: 5

Packet received is not corrupt. At time 22081.788018433184

Packet received is in order. Delivering packet(s) to layer5

Packet 14 Message ggggggggggggggggggggg delivered to Layer 5

New rcv_base = 15   rcv_end = 6

toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:

toLayer3: scheduling arrival on other side

In order ACK 14 Sent

_____

EVENT time: 22091.76247444075 type: 2 entity: 0

aInput()_____

Current Send_Base: 14   Send_end: 5

Expected ACK 14 received

stopTimer: stopping timer at 22091.76247444075

Recieved ACK for last sent packet. Stopping Timer at 22091.76247444075

Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 22298.739585558644 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 22298.739585558644
generateNextArrival(): future time for event 1 at entity 0 will be
22403.52793969543
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 22298.739585558644
Packet: 15 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 22298.74
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 22308.128727072974 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 22308.128727072974
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 22315.618549150062 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 22315.618549150062
Recieved ACK for last sent packet. Stopping Timer at
22315.618549150062
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 22403.52793969543 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 22403.52793969543
generateNextArrival(): future time for event 1 at entity 0 will be
22606.048768578145
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2101 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 22403.52793969543
Packet: 0 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 22403.53
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 22411.34543900876 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 22411.34543900876
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 22418.94018372143 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 22418.94018372143
Recieved ACK for last sent packet. Stopping Timer at 22418.94018372143
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 22606.048768578145 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 22606.048768578145

generateNextArrival(): future time for event 1 at entity 0 will be
22927.237769707328
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 22606.048768578145
Packet: 1 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 22606.05
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 22613.95223853267 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 22613.95223853267
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 22623.19745475631 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 22623.19745475631
Recieved ACK for last sent packet. Stopping Timer at 22623.19745475631
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 22927.237769707328 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 22927.237769707328
generateNextArrival(): future time for event 1 at entity 0 will be
23222.766808069093
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2

NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 22927.237769707328
Packet: 2 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 22927.24
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 22957.237769707328 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 22957.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 22957.237769707328
Starting timer for packet 2 at time 22957.237769707328
_____

EVENT time: 22963.442976165046 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 22963.442976165046
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 22968.275399029513 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 22968.275399029513
Recieved ACK for last sent packet. Stopping Timer at
22968.275399029513
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 23222.766808069093 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 23222.766808069093
generateNextArrival(): future time for event 1 at entity 0 will be
23397.210608233894
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2164 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 23222.766808069093
Packet: 3 With Payload: lllllllllllllllllll sent to B
Timer started at: 23222.77
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 23229.914670247505 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 23229.914670247505
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 23231.70296334727 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 23231.70296334727
Recieved ACK for last sent packet. Stopping Timer at 23231.70296334727
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 23397.210608233894 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 23397.210608233894
generateNextArrival(): future time for event 1 at entity 0 will be

23722.08624530778
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2185 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 23397.210608233894
Packet: 4 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 23397.21
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 23401.372295297097 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 23401.372295297097
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 23406.039368877224 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 23406.039368877224
Recieved ACK for last sent packet. Stopping Timer at
23406.039368877224
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 23722.08624530778 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 23722.08624530778
generateNextArrival(): future time for event 1 at entity 0 will be
23815.070039979248
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5

NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2206 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 23722.08624530778
Packet: 5 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 23722.09
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 23723.900906399733 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 23723.900906399733
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 23726.99249244667 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 23726.99249244667
Recieved ACK for last sent packet. Stopping Timer at 23726.99249244667
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 23815.070039979248 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 23815.070039979248
generateNextArrival(): future time for event 1 at entity 0 will be
23909.77507858516
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2227 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 23815.070039979248

Packet: 6 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 23815.07
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 23820.050233466598 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 23820.050233466598
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 23829.363292336802 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 23829.363292336802
Recieved ACK for last sent packet. Stopping Timer at
23829.363292336802
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 23909.77507858516 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 23909.77507858516
generateNextArrival(): future time for event 1 at entity 0 will be
24287.44773705252
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
ppppppppppppppppppppp
toLayer3: packet being lost
startTimer: starting timer at 23909.77507858516
Packet: 7 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 23909.78
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 23939.77507858516 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 23939.78
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 23939.77507858516
Starting timer for packet 7 at time 23939.77507858516

_____

EVENT time: 23941.660878322702 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 23941.660878322702
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 23950.14197210608 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 23950.14197210608
Recieved ACK for last sent packet. Stopping Timer at 23950.14197210608
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 24287.44773705252 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 24287.44773705252
generateNextArrival(): future time for event 1 at entity 0 will be
24295.211645863215
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window

toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 24287.44773705252
Packet: 8 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 24287.45
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 24295.211645863215 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 24295.211645863215
generateNextArrival(): future time for event 1 at entity 0 will be
24475.014496292002
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 24295.211645863215
startTimer: starting timer at 24295.211645863215
Packet: 9 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 24295.21
Packet added to retransmission buffer at index [1]
Next sequence number: 10

_____

EVENT time: 24300.215186010315 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 24300.215186010315
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 7 Sent

_____

EVENT time: 24303.65175328837 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Received duplicate ACK 7
Send_Base: 8 Send_End: 15
toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqq

toLayer3: packet being lost
Retransmitted packet: 8 Payload: qqqqqqqqqqqqqqqqqqqqq

_____

EVENT time: 24325.211645863215 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 24325.21
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 24325.211645863215
Starting timer for packet 9 at time 24325.211645863215

_____

EVENT time: 24331.220740379038 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 24331.220740379038
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
Packet 9 Message rrrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 9 Sent

_____

EVENT time: 24334.600451673938 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Cumulative ACK 9received
stopTimer: stopping timer at 24334.600451673938
Recieved ACK for last sent packet. Stopping Timer at
24334.600451673938
Sliding window 2 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 24336.49620044557 type: 2 entity: 1

```
bInput() _____
Packet 9 received. rcv_base: 10        rcv_end: 1
Packet received is not corrupt. At time 24336.49620044557
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____


EVENT time: 24341.98425244911  type: 2  entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received duplicate ACK 9
Send_Base: 10 Send_End: 1
Retransmission Buffer is empty. Ignore Duplicate ACK

_____


EVENT time: 24475.014496292002  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 24475.014496292002
generateNextArrival(): future time for event 1 at entity 0 will be
24732.432020020144
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10  acknum: 0  checksum: -2311  payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 24475.014496292002
Packet: 10 With Payload: sssssssssssssssssssss sent to B
Timer started at: 24475.01
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____


EVENT time: 24476.449293496506  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10        rcv_end: 1
Packet received is not corrupt. At time 24476.449293496506
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____
```

EVENT time: 24478.97012237922 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 24478.97012237922
Recieved ACK for last sent packet. Stopping Timer at 24478.97012237922
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 24732.432020020144 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 24732.432020020144
generateNextArrival(): future time for event 1 at entity 0 will be
24740.000610370193
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2332 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 24732.432020020144
Packet: 11 With Payload: tttttttttttttttttttt sent to B
Timer started at: 24732.43
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 24734.106051820432 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 24734.106051820432
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 24737.596179082615 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received

stopTimer: stopping timer at 24737.596179082615
Recieved ACK for last sent packet. Stopping Timer at
24737.596179082615
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 24740.000610370193 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 24740.000610370193
generateNextArrival(): future time for event 1 at entity 0 will be
25001.36112552263
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2353 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 24740.000610370193
Packet: 12 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 24740.00
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 24745.98553422651 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 24745.98553422651
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 24752.908444471574 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 24752.908444471574
Recieved ACK for last sent packet. Stopping Timer at
24752.908444471574
Sliding window 1 times

New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 25001.36112552263 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 25001.36112552263
generateNextArrival(): future time for event 1 at entity 0 will be
25324.77187414167
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2374 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 25001.36112552263
Packet: 13 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 25001.36
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 25007.91735587634 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 25007.91735587634
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 25009.050019837032 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 25009.050019837032
Recieved ACK for last sent packet. Stopping Timer at
25009.050019837032
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 25324.77187414167 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 25324.77187414167
generateNextArrival(): future time for event 1 at entity 0 will be
25656.56910916471
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 25324.77187414167
Packet: 14 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 25324.77
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 25325.785607470934 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 25325.785607470934
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 25332.34788048952 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 25332.34788048952
Recieved ACK for last sent packet. Stopping Timer at 25332.34788048952
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 25656.56910916471 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 25656.56910916471
generateNextArrival(): future time for event 1 at entity 0 will be

25732.438123722037
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 25656.56910916471
Packet: 15 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 25656.57
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 25664.854091006197 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 25686.56910916471 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 25686.57
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 25686.56910916471
Starting timer for packet 15 at time 25686.56910916471
_____

EVENT time: 25695.08151493881 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 25695.08151493881
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

```
EVENT time: 25699.925748466445  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 25699.925748466445
Recieved ACK for last sent packet. Stopping Timer at
25699.925748466445
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 25732.438123722037  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 25732.438123722037
generateNextArrival(): future time for event 1 at entity 0 will be
26079.628894924772
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2421  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 25732.438123722037
Packet: 0 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 25732.44
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____


EVENT time: 25733.93115024262  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 25733.93115024262
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 1      rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____


EVENT time: 25736.13556321909  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
```

stopTimer: stopping timer at 25736.13556321909
Recieved ACK for last sent packet. Stopping Timer at 25736.13556321909
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 26079.628894924772 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 26079.628894924772
generateNextArrival(): future time for event 1 at entity 0 will be
26337.87652211066
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2442 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 26079.628894924772
Packet: 1 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 26079.63
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 26084.99005096591 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 26084.99005096591
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 26094.6206244087 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 26094.6206244087
Recieved ACK for last sent packet. Stopping Timer at 26094.6206244087
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 26337.87652211066 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 26337.87652211066
generateNextArrival(): future time for event 1 at entity 0 will be
26694.259468367563
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −1943 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 26337.87652211066
Packet: 2 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 26337.88
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 26345.693197424236 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 26345.693197424236
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 26353.667531357765 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 26353.667531357765
Recieved ACK for last sent packet. Stopping Timer at
26353.667531357765
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 26694.259468367563 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 26694.259468367563
generateNextArrival(): future time for event 1 at entity 0 will be
27048.84792626728
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 26694.259468367563
Packet: 3 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 26694.26
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 26702.371135593738 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 26702.371135593738
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 26724.259468367563 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 26724.26
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 26724.259468367563
Starting timer for packet 3 at time 26724.259468367563

_____

EVENT time: 26728.391766106142 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 26754.259468367563 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 26754.26
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 26754.259468367563
Starting timer for packet 3 at time 26754.259468367563

_____

EVENT time: 26756.57951597644 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 26756.57951597644
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 26766.32792138432 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 26766.32792138432
Recieved ACK for last sent packet. Stopping Timer at 26766.32792138432
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 27048.84792626728 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 27048.84792626728
generateNextArrival(): future time for event 1 at entity 0 will be
27202.514725180823
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1985 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side

```
startTimer: starting timer at 27048.84792626728
Packet: 4 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 27048.85
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____


EVENT time: 27056.486068300423  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4        rcv_end: 11
Packet received is not corrupt. At time 27056.486068300423
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ccccccccccccccccccccc delivered to Layer 5
New rcv_base = 5      rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____


EVENT time: 27059.844355601672  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 27059.844355601672
Recieved ACK for last sent packet. Stopping Timer at
27059.844355601672
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 27202.514725180823  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 27202.514725180823
generateNextArrival(): future time for event 1 at entity 0 will be
27372.502822962128
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2006  payload:
ddddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 27202.514725180823
Packet: 5 With Payload: ddddddddddddddddddddd sent to B
Timer started at: 27202.51
Packet added to retransmission buffer at index [0]
```

Next sequence number: 6
_____

EVENT time: 27206.79726554155 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 27206.79726554155
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 27212.82421338542 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 27212.82421338542
Recieved ACK for last sent packet. Stopping Timer at 27212.82421338542
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 27372.502822962128 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 27372.502822962128
generateNextArrival(): future time for event 1 at entity 0 will be
27638.978240302746
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 27372.502822962128
Packet: 6 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 27372.50
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 27380.52192754906 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 27402.502822962128 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 27402.50
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 27402.502822962128
Starting timer for packet 6 at time 27402.502822962128
_____

EVENT time: 27404.054902798547 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 27404.054902798547
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 27413.586596270638 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 27413.586596270638
Recieved ACK for last sent packet. Stopping Timer at
27413.586596270638
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 27638.978240302746 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 27638.978240302746
generateNextArrival(): future time for event 1 at entity 0 will be

```
28037.256996368298
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2048  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 27638.978240302746
Packet: 7 With Payload: ffffffffffffffffffff sent to B
Timer started at: 27638.98
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 27641.373821222573  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7        rcv_end: 14
Packet received is not corrupt. At time 27641.373821222573
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 8       rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 27646.540238654747  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 14.0

_____


EVENT time: 27668.978240302746  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 27668.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2048  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 27668.978240302746
Starting timer for packet 7 at time 27668.978240302746

_____
```

```
EVENT time: 27672.46836756493  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 27672.46836756493
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____


EVENT time: 27681.820978423413  type: 2  entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 27681.820978423413
Recieved ACK for last sent packet. Stopping Timer at
27681.820978423413
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 28037.256996368298  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28037.256996368298
generateNextArrival(): future time for event 1 at entity 0 will be
28079.995117038485
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2069  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28037.256996368298
Packet: 8 With Payload: gggggggggggggggggggg sent to B
Timer started at: 28037.26
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 28047.129001739555  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 28047.129001739555
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message gggggggggggggggggggg delivered to Layer 5
```

New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 28056.791161839657 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 28056.791161839657
Recieved ACK for last sent packet. Stopping Timer at
28056.791161839657
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 28079.995117038485 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28079.995117038485
generateNextArrival(): future time for event 1 at entity 0 will be
28383.288064210945
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2090 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28079.995117038485
Packet: 9 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 28080.00
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 28085.55046235542 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 28085.55046235542
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 28092.89168980987 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 28092.89168980987
Recieved ACK for last sent packet. Stopping Timer at 28092.89168980987
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 28383.288064210945 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28383.288064210945
generateNextArrival(): future time for event 1 at entity 0 will be
28548.72280037843
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2111 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28383.288064210945
Packet: 10 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 28383.29
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 28391.364299447618 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 28391.364299447618
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 28398.012268440812 type: 2 entity: 0
aInput()_____

Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 28398.012268440812
Recieved ACK for last sent packet. Stopping Timer at
28398.012268440812
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 28548.72280037843 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28548.72280037843
generateNextArrival(): future time for event 1 at entity 0 will be
28582.9645680105
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28548.72280037843
Packet: 11 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 28548.72
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 28558.287453840756 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 28558.287453840756
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 28564.079012421036 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 28564.079012421036
Recieved ACK for last sent packet. Stopping Timer at

28564.079012421036
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 28582.9645680105 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28582.9645680105
generateNextArrival(): future time for event 1 at entity 0 will be
28888.052003540146
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28582.9645680105
Packet: 12 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 28582.96
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 28590.916653950622 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 28590.916653950622
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 28593.030152287363 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 28593.030152287363
Recieved ACK for last sent packet. Stopping Timer at
28593.030152287363
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 28888.052003540146 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 28888.052003540146
generateNextArrival(): future time for event 1 at entity 0 will be
29194.29914242988
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
lllllllllllllllllll
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 28888.052003540146
Packet: 13 With Payload: lllllllllllllllllll sent to B
Timer started at: 28888.05
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 28891.85772270882 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 28918.052003540146 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 28918.05
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 28918.052003540146
Starting timer for packet 13 at time 28918.052003540146

_____

EVENT time: 28927.769096957305 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 28927.769096957305
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message lllllllllllllllllll delivered to Layer 5

New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 28948.052003540146 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 28948.05
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 28948.052003540146
Starting timer for packet 13 at time 28948.052003540146

_____

EVENT time: 28950.29761650441 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 28950.29761650441
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 28953.719077120273 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 28953.719077120273
Recieved ACK for last sent packet. Stopping Timer at
28953.719077120273
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 29194.29914242988 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 29194.29914242988
generateNextArrival(): future time for event 1 at entity 0 will be
29492.526017029326
aOutput()_____
Send_Base: 14 Send_end: 5

NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2195 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 29194.29914242988
Packet: 14 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 29194.30
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 29197.567339091158 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 29197.567339091158
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 29199.66106143376 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 29199.66106143376
Recieved ACK for last sent packet. Stopping Timer at 29199.66106143376
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 29492.526017029326 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 29492.526017029326
generateNextArrival(): future time for event 1 at entity 0 will be
29700.686666463207
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side

startTimer: starting timer at 29492.526017029326
Packet: 15 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 29492.53
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 29493.99707022309 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 29493.99707022309
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 29496.414899136325 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 29496.414899136325
Recieved ACK for last sent packet. Stopping Timer at
29496.414899136325
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 29700.686666463207 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 29700.686666463207
generateNextArrival(): future time for event 1 at entity 0 will be
29862.11737418744
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2221 payload:
ooooooooooooooooooooo
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 29700.686666463207
Packet: 0 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 29700.69

Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 29703.206671346168 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 29730.686666463207 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 29730.69
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2221 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 29730.686666463207
Starting timer for packet 0 at time 29730.686666463207

_____

EVENT time: 29732.111301004057 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 29732.111301004057
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 29738.68483535264 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 15.0

_____

EVENT time: 29760.686666463207 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 29760.69

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2221 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 29760.686666463207
Starting timer for packet 0 at time 29760.686666463207

_____

EVENT time: 29767.659291360207 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 29767.659291360207
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 29772.873226111635 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 29772.873226111635
Recieved ACK for last sent packet. Stopping Timer at
29772.873226111635
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 29862.11737418744 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 29862.11737418744
generateNextArrival(): future time for event 1 at entity 0 will be
30161.247596667374
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2242 payload:
pppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 29862.11737418744
Packet: 1 With Payload: pppppppppppppppppppp sent to B
Timer started at: 29862.12
Packet added to retransmission buffer at index [0]

Next sequence number: 2
_____

EVENT time: 29864.330301828057 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 29892.11737418744 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 29892.12
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2242 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 29892.11737418744
Starting timer for packet 1 at time 29892.11737418744

_____

EVENT time: 29900.13263344218 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 29900.13263344218
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 29909.41987365337 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 29909.41987365337
Recieved ACK for last sent packet. Stopping Timer at 29909.41987365337
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 30161.247596667374 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 30161.247596667374
generateNextArrival(): future time for event 1 at entity 0 will be
30326.04754783776
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 30161.247596667374
Packet: 2 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 30161.25
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 30162.92931913205 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 30162.92931913205
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 30171.373882259588 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK
Number of Corruped Packets to A: 16.0

_____

EVENT time: 30191.247596667374 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 30191.25
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 30191.247596667374

Starting timer for packet 2 at time 30191.247596667374
_____

EVENT time: 30197.746147038175 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 30197.746147038175
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 30206.56810205389 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 30206.56810205389
Recieved ACK for last sent packet. Stopping Timer at 30206.56810205389
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 30326.04754783776 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30326.04754783776
generateNextArrival(): future time for event 1 at entity 0 will be
30398.754844813375
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 30326.04754783776
Packet: 3 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 30326.05
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 30330.63936277352 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10

Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 30356.04754783776 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 30356.05
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 30356.04754783776
Starting timer for packet 3 at time 30356.04754783776

_____

EVENT time: 30361.714682454905 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 30361.714682454905
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 30362.76165044099 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 30362.76165044099
Recieved ACK for last sent packet. Stopping Timer at 30362.76165044099
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 30398.754844813375 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30398.754844813375
generateNextArrival(): future time for event 1 at entity 0 will be
30446.278267769398
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4

NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2305 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 30398.754844813375
Packet: 4 With Payload: sssssssssssssssssssss sent to B
Timer started at: 30398.75
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 30403.93279824213 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 30403.93279824213
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 30409.0657063509 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 30409.0657063509
Recieved ACK for last sent packet. Stopping Timer at 30409.0657063509
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 30446.278267769398 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30446.278267769398
generateNextArrival(): future time for event 1 at entity 0 will be
30701.095614490183
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
tttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 30446.278267769398

Packet: 5 With Payload: tttttttttttttttttttt sent to B
Timer started at: 30446.28
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 30476.278267769398 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 30476.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
tttttttttttttttttttt
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 30476.278267769398
Starting timer for packet 5 at time 30476.278267769398

_____

EVENT time: 30506.278267769398 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 30506.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 30506.278267769398
Starting timer for packet 5 at time 30506.278267769398

_____

EVENT time: 30516.043702505565 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 30516.043702505565
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 30518.70680867946 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received

stopTimer: stopping timer at 30518.70680867946
Recieved ACK for last sent packet. Stopping Timer at 30518.70680867946
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 30701.095614490183 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30701.095614490183
generateNextArrival(): future time for event 1 at entity 0 will be
30712.082277901543
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 30701.095614490183
Packet: 6 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 30701.10
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 30707.88201544236 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 30707.88201544236
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 30712.082277901543 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30712.082277901543
generateNextArrival(): future time for event 1 at entity 0 will be
30718.72310556352
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 7
NextSeqNo is in send window

toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 30712.082277901543
startTimer: starting timer at 30712.082277901543
Packet: 7 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 30712.08
Packet added to retransmission buffer at index [1]
Next sequence number: 8
_____

EVENT time: 30712.580126346624 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 30714.102389599288 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 30718.72310556352 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 30718.72310556352
generateNextArrival(): future time for event 1 at entity 0 will be
31038.78902554399
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2389 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 30718.72310556352
startTimer: starting timer at 30718.72310556352
Packet: 8 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 30718.72
Packet added to retransmission buffer at index [1]
Next sequence number: 9
_____

EVENT time: 30720.001892147582 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 30720.001892147582
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 6 Sent

_____

EVENT time: 30726.741325113675 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received duplicate ACK 6
Send_Base: 7 Send_End: 14
toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitted packet: 7 Payload: vvvvvvvvvvvvvvvvvvvv

_____

EVENT time: 30729.277535325167 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 30729.277535325167
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
Packet 8 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 8 Sent

_____

EVENT time: 30734.829584643077 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Cumulative ACK 8received
stopTimer: stopping timer at 30734.829584643077
Recieved ACK for last sent packet. Stopping Timer at
30734.829584643077
Sliding window 2 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31038.78902554399 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31038.78902554399
generateNextArrival(): future time for event 1 at entity 0 will be
31117.16055787835
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31038.78902554399
Packet: 9 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 31038.79
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 31046.012421033352 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 31046.012421033352
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____

EVENT time: 31068.78902554399 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31068.79
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 31068.78902554399
Starting timer for packet 9 at time 31068.78902554399

_____

EVENT time: 31076.404919583725 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1

Packet received is not corrupt. At time 31076.404919583725
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent
_____

EVENT time: 31080.74129459517 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 31080.74129459517
Recieved ACK for last sent packet. Stopping Timer at 31080.74129459517
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 31117.16055787835 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31117.16055787835
generateNextArrival(): future time for event 1 at entity 0 will be
31251.161229285557
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2431 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31117.16055787835
Packet: 10 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 31117.16
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 31121.896847437965 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 31121.896847437965
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 31126.815240943626 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 31126.815240943626
Recieved ACK for last sent packet. Stopping Timer at
31126.815240943626
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31251.161229285557 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31251.161229285557
generateNextArrival(): future time for event 1 at entity 0 will be
31303.091525009913
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2452 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31251.161229285557
Packet: 11 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 31251.16
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 31252.798455763415 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 31252.798455763415
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 31257.016449476603 type: 2 entity: 0
aInput()_____

Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 31257.016449476603
Recieved ACK for last sent packet. Stopping Timer at
31257.016449476603
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 31303.091525009913 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31303.091525009913
generateNextArrival(): future time for event 1 at entity 0 will be
31424.396496475107
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31303.091525009913
Packet: 12 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 31303.09
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 31310.780480361333 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 31310.780480361333
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
In order ACK 12 Sent
_____

EVENT time: 31333.091525009913 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31333.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa

toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 31333.091525009913
Starting timer for packet 12 at time 31333.091525009913

_____

EVENT time: 31336.121860408333 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 31336.121860408333
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 31342.126560258792 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 17.0

_____

EVENT time: 31363.091525009913 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31363.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being lost
Retransmitting Packet 12
startTimer: starting timer at 31363.091525009913
Starting timer for packet 12 at time 31363.091525009913

_____

EVENT time: 31393.091525009913 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31393.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being lost
Retransmitting Packet 12
startTimer: starting timer at 31393.091525009913
Starting timer for packet 12 at time 31393.091525009913

_____

EVENT time: 31423.091525009913 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31423.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 31423.091525009913
Starting timer for packet 12 at time 31423.091525009913

_____

EVENT time: 31424.396496475107 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31424.396496475107
generateNextArrival(): future time for event 1 at entity 0 will be
31597.875911740466
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -1974 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 31424.396496475107
startTimer: starting timer at 31424.396496475107
Packet: 13 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 31424.40
Packet added to retransmission buffer at index [1]
Next sequence number: 14

_____

EVENT time: 31428.18652912991 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 31428.18652912991
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 31435.598071230193 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 31435.598071230193

Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 31437.975035859243 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31443.728965117338 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 31443.728965117338
Recieved ACK for last sent packet. Stopping Timer at
31443.728965117338
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31597.875911740466 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31597.875911740466
generateNextArrival(): future time for event 1 at entity 0 will be
31638.34345530564
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1995 payload:
cccccccccccccccccccc
toLayer3: packet being lost
startTimer: starting timer at 31597.875911740466
Packet: 14 With Payload: cccccccccccccccccccc sent to B
Timer started at: 31597.88
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 31627.875911740466 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31627.88
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -1995 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 31627.875911740466
Starting timer for packet 14 at time 31627.875911740466

_____

EVENT time: 31630.75572985015 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 31630.75572985015
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 31637.452314828937 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 31637.452314828937
Recieved ACK for last sent packet. Stopping Timer at
31637.452314828937
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31638.34345530564 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31638.34345530564
generateNextArrival(): future time for event 1 at entity 0 will be
31894.49140903958
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window

toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31638.34345530564
Packet: 15 With Payload: dddddddddddddddddddd sent to B
Timer started at: 31638.34
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 31648.035004730365 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 31668.34345530564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31668.34
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 31668.34345530564
Starting timer for packet 15 at time 31668.34345530564

_____

EVENT time: 31698.34345530564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31698.34
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 31698.34345530564
Starting timer for packet 15 at time 31698.34345530564

_____

EVENT time: 31728.34345530564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 31728.34
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:

dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 31728.34345530564
Starting timer for packet 15 at time 31728.34345530564

_____

EVENT time: 31731.322428052612 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 31731.322428052612
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 31739.822473830376 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 31739.822473830376
Recieved ACK for last sent packet. Stopping Timer at
31739.822473830376
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 31894.49140903958 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 31894.49140903958
generateNextArrival(): future time for event 1 at entity 0 will be
32234.321115756702
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2021 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 31894.49140903958
Packet: 0 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 31894.49
Packet added to retransmission buffer at index [0]

Next sequence number: 1
_____

EVENT time: 31900.869106112856 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 31900.869106112856
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message eeeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 31905.193670461133 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 31905.193670461133
Recieved ACK for last sent packet. Stopping Timer at
31905.193670461133
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32234.321115756702 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32234.321115756702
generateNextArrival(): future time for event 1 at entity 0 will be
32317.282631916252
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 32234.321115756702
Packet: 1 With Payload: ffffffffffffffffffff sent to B
Timer started at: 32234.32
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 32241.08307138279 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 32241.08307138279
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 32247.274269844656 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 32247.274269844656
Recieved ACK for last sent packet. Stopping Timer at
32247.274269844656
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32317.282631916252 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32317.282631916252
generateNextArrival(): future time for event 1 at entity 0 will be
32411.45054475539
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggg
toLayer3: packet being lost
startTimer: starting timer at 32317.282631916252
Packet: 2 With Payload: gggggggggggggggggggg sent to B
Timer started at: 32317.28
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 32347.282631916252 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 32347.28
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 32347.282631916252
Starting timer for packet 2 at time 32347.282631916252

_____

EVENT time: 32352.30896938993 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 32352.30896938993
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 32356.80932035279 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 32356.80932035279
Recieved ACK for last sent packet. Stopping Timer at 32356.80932035279
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32411.45054475539 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32411.45054475539
generateNextArrival(): future time for event 1 at entity 0 will be
32419.556260872214
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 32411.45054475539
Packet: 3 With Payload: hhhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 32411.45
Packet added to retransmission buffer at index [0]

Next sequence number: 4

_____

EVENT time: 32419.556260872214 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32419.556260872214
generateNextArrival(): future time for event 1 at entity 0 will be
32424.29273354289
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2105 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 32419.556260872214
startTimer: starting timer at 32419.556260872214
Packet: 4 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 32419.56
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____

EVENT time: 32421.10858485671 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 32421.10858485671
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 32424.15045625171 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 32424.15045625171
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 32424.29273354289 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32424.29273354289
generateNextArrival(): future time for event 1 at entity 0 will be
32615.375225074004
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 32424.29273354289
startTimer: starting timer at 32424.29273354289
Packet: 5 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 32424.29
Packet added to retransmission buffer at index [2]
Next sequence number: 6

_____

EVENT time: 32425.366344187747 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 32425.366344187747
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 32429.792931913198 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32439.238654744095 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
Sliding window 1 times

New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 32444.491042817463 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 32444.491042817463
Recieved ACK for last sent packet. Stopping Timer at
32444.491042817463
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32615.375225074004 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32615.375225074004
generateNextArrival(): future time for event 1 at entity 0 will be
32706.625568407235
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 32615.375225074004
Packet: 6 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 32615.38
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 32645.375225074004 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 32645.38
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 32645.375225074004
Starting timer for packet 6 at time 32645.375225074004

_____

EVENT time: 32654.102969450967 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 32654.102969450967
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 32658.352824488047 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 32658.352824488047
Recieved ACK for last sent packet. Stopping Timer at
32658.352824488047
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32706.625568407235 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32706.625568407235
generateNextArrival(): future time for event 1 at entity 0 will be
32760.38697470015
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 32706.625568407235
Packet: 7 With Payload: llllllllllllllllllll sent to B
Timer started at: 32706.63
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 32716.015808587905 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14

Packet received is not corrupt. At time 32716.015808587905
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being lost
In order ACK 7 Sent
_____

EVENT time: 32736.625568407235 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 32736.63
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 32736.625568407235
Starting timer for packet 7 at time 32736.625568407235
_____

EVENT time: 32740.704580828267 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 32740.704580828267
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent
_____

EVENT time: 32748.158421582684 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 18.0
_____

EVENT time: 32760.38697470015 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32760.38697470015
generateNextArrival(): future time for event 1 at entity 0 will be
32811.47495956297
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8

NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2189 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 32760.38697470015
startTimer: starting timer at 32760.38697470015
Packet: 8 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 32760.39
Packet added to retransmission buffer at index [1]
Next sequence number: 9
_____

EVENT time: 32762.68642231513 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 32790.38697470015 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 32790.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
lllllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
toLayer3: seqnum: 8 acknum: 0 checksum: -2189 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 32790.38697470015
Starting timer for packet 8 at time 32790.38697470015
_____

EVENT time: 32797.552140873435 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 32797.552140873435
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent
_____

EVENT time: 32802.04232917264 type: 2 entity: 0
aInput()_____

Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
————————————————————————

EVENT time: 32802.4872890408 type: 2 entity: 1
bInput() ————————————————————————————
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 32802.4872890408
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message mmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

————————————————————————

EVENT time: 32804.398632770775 type: 2 entity: 0
aInput()————————————————————————————
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 19.0

————————————————————————

EVENT time: 32811.47495956297 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32811.47495956297
generateNextArrival(): future time for event 1 at entity 0 will be
32886.550492873925
aOutput()————————————————————————————
Send_Base: 8 Send_end: 15
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2210 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 32811.47495956297
startTimer: starting timer at 32811.47495956297
Packet: 9 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 32811.47
Packet added to retransmission buffer at index [1]
Next sequence number: 10

————————————————————————

EVENT time: 32815.741294595166 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 32815.741294595166
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 32818.35413678395 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Cumulative ACK 9received
stopTimer: stopping timer at 32818.35413678395
Recieved ACK for last sent packet. Stopping Timer at 32818.35413678395
Sliding window 2 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 32886.550492873925 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 32886.550492873925
generateNextArrival(): future time for event 1 at entity 0 will be
33086.70308542131
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2231 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 32886.550492873925
Packet: 10 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 32886.55
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 32892.161870174255 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 32892.161870174255

Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: packet being lost
In order ACK 10 Sent

_____

EVENT time: 32916.550492873925 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 32916.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2231 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 32916.550492873925
Starting timer for packet 10 at time 32916.550492873925

_____

EVENT time: 32926.43595690786 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 32926.43595690786
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent

_____

EVENT time: 32927.71117282631 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 32927.71117282631
Recieved ACK for last sent packet. Stopping Timer at 32927.71117282631
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 33086.70308542131 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 33086.70308542131
generateNextArrival(): future time for event 1 at entity 0 will be
33366.86300241096
aOutput()_____

Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2252 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 33086.70308542131
Packet: 11 With Payload: pppppppppppppppppppp sent to B
Timer started at: 33086.70
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 33094.800744651635 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 33094.800744651635
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 33097.86431470687 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 33097.86431470687
Recieved ACK for last sent packet. Stopping Timer at 33097.86431470687
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 33366.86300241096 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 33366.86300241096
generateNextArrival(): future time for event 1 at entity 0 will be
33560.728782006285
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2273 payload:
qqqqqqqqqqqqqqqqqqqq

toLayer3: scheduling arrival on other side
startTimer: starting timer at 33366.86300241096
Packet: 12 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 33366.86
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 33368.059938352606 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 33368.059938352606
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 33370.06549272133 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 33370.06549272133
Recieved ACK for last sent packet. Stopping Timer at 33370.06549272133
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 33560.728782006285 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 33560.728782006285
generateNextArrival(): future time for event 1 at entity 0 will be
33654.127628406626
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2294 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 33560.728782006285
Packet: 13 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 33560.73
Packet added to retransmission buffer at index [0]

Next sequence number: 14
_____

EVENT time: 33563.671498764 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 33563.671498764
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 33570.661976989046 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 33570.661976989046
Recieved ACK for last sent packet. Stopping Timer at
33570.661976989046
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 33654.127628406626 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 33654.127628406626
generateNextArrival(): future time for event 1 at entity 0 will be
33958.12860499893
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 33654.127628406626
Packet: 14 With Payload: ssssssssssssssssssss sent to B
Timer started at: 33654.13
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 33657.67543565172 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 33657.67543565172
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 33667.15659047212 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 33667.15659047212
Recieved ACK for last sent packet. Stopping Timer at 33667.15659047212
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 33958.12860499893 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 33958.12860499893
generateNextArrival(): future time for event 1 at entity 0 will be
34112.918485061185
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 33958.12860499893
Packet: 15 With Payload: tttttttttttttttttttt sent to B
Timer started at: 33958.13
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 33965.80245368816 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 33965.80245368816
Packet received is in order. Delivering packet(s) to layer5

Packet 15 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 33970.85103915524 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 33970.85103915524
Recieved ACK for last sent packet. Stopping Timer at 33970.85103915524
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 34112.918485061185 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 34112.918485061185
generateNextArrival(): future time for event 1 at entity 0 will be
34160.942411572614
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2341 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 34112.918485061185
Packet: 0 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 34112.92
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 34117.90884121219 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 34117.90884121219
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

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EVENT time: 34124.12530899991 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 34124.12530899991
Recieved ACK for last sent packet. Stopping Timer at 34124.12530899991
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

————————————————

EVENT time: 34160.942411572614 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 34160.942411572614
generateNextArrival(): future time for event 1 at entity 0 will be
34359.06857509079
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2362 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 34160.942411572614
Packet: 1 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 34160.94
Packet added to retransmission buffer at index [0]
Next sequence number: 2

————————————————

EVENT time: 34166.13382366405 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 34166.13382366405
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

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EVENT time: 34167.94793542283 type: 2 entity: 0
aInput()_____

Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 34167.94793542283
Recieved ACK for last sent packet. Stopping Timer at 34167.94793542283
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 34359.06857509079 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 34359.06857509079
generateNextArrival(): future time for event 1 at entity 0 will be
34741.807306131166
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2383 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 34359.06857509079
Packet: 2 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 34359.07
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 34367.4183782464 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 34367.4183782464
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 34372.56309701834 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 34372.56309701834
Recieved ACK for last sent packet. Stopping Timer at 34372.56309701834
Sliding window 1 times

New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 34741.807306131166 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 34741.807306131166
generateNextArrival(): future time for event 1 at entity 0 will be
34849.855037079986
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 34741.807306131166
Packet: 3 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 34741.81
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 34746.446363719595 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 34746.446363719595
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 34771.807306131166 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 34771.81
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 34771.807306131166
Starting timer for packet 3 at time 34771.807306131166

_____

EVENT time: 34777.87380596332 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 34777.87380596332
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 34780.53114413892 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 34780.53114413892
Recieved ACK for last sent packet. Stopping Timer at 34780.53114413892
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 34849.855037079986 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 34849.855037079986
generateNextArrival(): future time for event 1 at entity 0 will be
35082.02764976958
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 34849.855037079986
Packet: 4 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 34849.86
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 34850.88937040314 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 34850.88937040314
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 5   rcv_end = 12

toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 34855.59791863765 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 34855.59791863765
Recieved ACK for last sent packet. Stopping Timer at 34855.59791863765
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 35082.02764976958 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 35082.02764976958
generateNextArrival(): future time for event 1 at entity 0 will be
35241.1877803888
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2446 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 35082.02764976958
Packet: 5 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 35082.03
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 35091.5774712363 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 35091.5774712363
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 35095.89544358653 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 35095.89544358653
Recieved ACK for last sent packet. Stopping Timer at 35095.89544358653
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 35241.1877803888 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 35241.1877803888
generateNextArrival(): future time for event 1 at entity 0 will be
35613.843195898306
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −1947 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 35241.1877803888
Packet: 6 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 35241.19
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 35248.92809839167 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 35248.92809839167
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 35255.77684865871 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received

stopTimer: stopping timer at 35255.77684865871
Recieved ACK for last sent packet. Stopping Timer at 35255.77684865871
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 35613.843195898306 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 35613.843195898306
generateNextArrival(): future time for event 1 at entity 0 will be
35959.910885952326
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -1968 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 35613.843195898306
Packet: 7 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 35613.84
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 35619.14392529068 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 35643.843195898306 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 35643.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -1968 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 35643.843195898306
Starting timer for packet 7 at time 35643.843195898306
_____

EVENT time: 35645.07116916409 type: 2 entity: 1

bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 35645.07116916409
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 35647.204718161556 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 35647.204718161556
Recieved ACK for last sent packet. Stopping Timer at
35647.204718161556
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 35959.910885952326 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 35959.910885952326
generateNextArrival(): future time for event 1 at entity 0 will be
36153.21512497329
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -1989 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 35959.910885952326
Packet: 8 With Payload: cccccccccccccccccccc sent to B
Timer started at: 35959.91
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 35968.25821710867 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 35968.25821710867
Packet received is in order. Delivering packet(s) to layer5

Packet 8 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 35976.397625659956 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 35976.397625659956
Recieved ACK for last sent packet. Stopping Timer at
35976.397625659956
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 36153.21512497329 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 36153.21512497329
generateNextArrival(): future time for event 1 at entity 0 will be
36540.84902493362
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2010 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 36153.21512497329
Packet: 9 With Payload: dddddddddddddddddddd sent to B
Timer started at: 36153.22
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 36159.7787713248 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 36159.7787713248
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side

In order ACK 9 Sent

_____

EVENT time: 36164.830103457745 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 36164.830103457745
Recieved ACK for last sent packet. Stopping Timer at
36164.830103457745
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 36540.84902493362 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 36540.84902493362
generateNextArrival(): future time for event 1 at entity 0 will be
36681.624805444495
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2031 payload:
eeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 36540.84902493362
Packet: 10 With Payload: eeeeeeeeeeeeeeeeeee sent to B
Timer started at: 36540.85
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 36549.60341196936 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 36549.60341196936
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message eeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

```
EVENT time: 36558.01940977202  type: 2  entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 36558.01940977202
Recieved ACK for last sent packet. Stopping Timer at 36558.01940977202
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 36681.624805444495  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 36681.624805444495
generateNextArrival(): future time for event 1 at entity 0 will be
36863.02682576982
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2052  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 36681.624805444495
Packet: 11 With Payload: ffffffffffffffffffff sent to B
Timer started at: 36681.62
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____


EVENT time: 36683.08102664265  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11      rcv_end: 2
Packet received is not corrupt. At time 36683.08102664265
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 36686.19431134983  type: 2  entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Received Corrupted ACK
```

Number of Corruped Packets to A: 20.0
_____

EVENT time: 36711.624805444495 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 36711.62
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2052 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 36711.624805444495
Starting timer for packet 11 at time 36711.624805444495

_____

EVENT time: 36716.2418897061 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 36716.2418897061
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 36717.84780419324 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Received Corrupted ACK
Number of Corruped Packets to A: 21.0

_____

EVENT time: 36741.624805444495 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 36741.62
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2052 payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 11
startTimer: starting timer at 36741.624805444495
Starting timer for packet 11 at time 36741.624805444495

_____

EVENT time: 36771.624805444495 type: 0 entity: 0

```
aTimerInterrup()_____
TIMEOUT!!! at: 36771.62
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11  acknum: 0  checksum: -2052  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 36771.624805444495
Starting timer for packet 11 at time 36771.624805444495

_____


EVENT time: 36780.90380565813  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 36780.90380565813
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____


EVENT time: 36785.64943388164  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 36785.64943388164
Recieved ACK for last sent packet. Stopping Timer at 36785.64943388164
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 36863.02682576982  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 36863.02682576982
generateNextArrival(): future time for event 1 at entity 0 will be
36953.215124973285
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2073  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 36863.02682576982
Packet: 12 With Payload: gggggggggggggggggggg sent to B
Timer started at: 36863.03
Packet added to retransmission buffer at index [0]
```

Next sequence number: 13
_____

EVENT time: 36869.019440290525 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 36869.019440290525
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____

EVENT time: 36893.02682576982 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 36893.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2073 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 36893.02682576982
Starting timer for packet 12 at time 36893.02682576982

_____

EVENT time: 36899.87777336954 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 36899.87777336954
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 36908.6316110721 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 36908.6316110721
Recieved ACK for last sent packet. Stopping Timer at 36908.6316110721
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 36953.215124973285 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 36953.215124973285
generateNextArrival(): future time for event 1 at entity 0 will be
37299.17294839319
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2094 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 36953.215124973285
Packet: 13 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 36953.22
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 36959.474715414886 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 36959.474715414886
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 36964.18518631549 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 36964.18518631549
Recieved ACK for last sent packet. Stopping Timer at 36964.18518631549
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 37299.17294839319 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 37299.17294839319

generateNextArrival(): future time for event 1 at entity 0 will be
37310.75777459028
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2115 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 37299.17294839319
Packet: 14 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 37299.17
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 37300.20618305001 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 37300.20618305001
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 37309.815057832566 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 37309.815057832566
Recieved ACK for last sent packet. Stopping Timer at
37309.815057832566
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 37310.75777459028 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 37310.75777459028
generateNextArrival(): future time for event 1 at entity 0 will be
37680.25147251807
aOutput()_____
Send_Base: 15 Send_end: 6

NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 37310.75777459028
Packet: 15 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 37310.76
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 37319.08203375347 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 37340.75777459028 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 37340.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 37340.75777459028
Starting timer for packet 15 at time 37340.75777459028
_____

EVENT time: 37370.75777459028 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 37370.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 37370.75777459028
Starting timer for packet 15 at time 37370.75777459028
_____

EVENT time: 37379.60829493087 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6

Packet received is not corrupt. At time 37379.60829493087
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message jjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 37385.09387493514 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 37385.09387493514
Recieved ACK for last sent packet. Stopping Timer at 37385.09387493514
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 37680.25147251807 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 37680.25147251807
generateNextArrival(): future time for event 1 at entity 0 will be
37953.03811761833
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2141 payload:
kkkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 37680.25147251807
Packet: 0 With Payload: kkkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 37680.25
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 37687.24771874141 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 37687.24771874141
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message kkkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:

toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 37689.9295022431 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 37689.9295022431
Recieved ACK for last sent packet. Stopping Timer at 37689.9295022431
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 37953.03811761833 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 37953.03811761833
generateNextArrival(): future time for event 1 at entity 0 will be
38085.23209326456
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2162 payload:
lllllllllllllllllll
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 37953.03811761833
Packet: 1 With Payload: lllllllllllllllllll sent to B
Timer started at: 37953.04
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 37954.44462416455 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 37983.03811761833 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 37983.04
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2162 payload:

llllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 37983.03811761833
Starting timer for packet 1 at time 37983.03811761833

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EVENT time: 37991.959227271334 type: 2 entity: 1
bInput() ——————————————————————————
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 37991.959227271334
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

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EVENT time: 37995.35404522843 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 37995.35404522843
Recieved ACK for last sent packet. Stopping Timer at 37995.35404522843
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

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EVENT time: 38085.23209326456 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 38085.23209326456
generateNextArrival(): future time for event 1 at entity 0 will be
38168.742942594676
aOutput()——————————————————————————
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2183 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 38085.23209326456
Packet: 2 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 38085.23
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 38091.677907650985 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 38091.677907650985
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 38101.28321176793 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 38101.28321176793
Recieved ACK for last sent packet. Stopping Timer at 38101.28321176793
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 38168.742942594676 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 38168.742942594676
generateNextArrival(): future time for event 1 at entity 0 will be
38506.497390667435
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2204 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 38168.742942594676
Packet: 3 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 38168.74
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 38177.42811365092 type: 2 entity: 1
bInput() _____

Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 38177.42811365092
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 38180.638355662704 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 38180.638355662704
Recieved ACK for last sent packet. Stopping Timer at
38180.638355662704
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 38506.497390667435 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 38506.497390667435
generateNextArrival(): future time for event 1 at entity 0 will be
38601.7761772515
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2225 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 38506.497390667435
Packet: 4 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 38506.50
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 38516.32325205237 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 38516.32325205237
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ooooooooooooooooooooo delivered to Layer 5

New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 38524.17014069032 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 38524.17014069032
Recieved ACK for last sent packet. Stopping Timer at 38524.17014069032
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

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EVENT time: 38601.7761772515 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 38601.7761772515
generateNextArrival(): future time for event 1 at entity 0 will be
38827.90612506485
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2246 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 38601.7761772515
Packet: 5 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 38601.78
Packet added to retransmission buffer at index [0]
Next sequence number: 6

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EVENT time: 38608.6927701651 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 38608.6927701651
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: packet being lost
In order ACK 5 Sent

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EVENT time: 38631.7761772515 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 38631.78
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2246 payload:
pppppppppppppppppppp
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 38631.7761772515
Starting timer for packet 5 at time 38631.7761772515

_____

EVENT time: 38661.7761772515 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 38661.78
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2246 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 38661.7761772515
Starting timer for packet 5 at time 38661.7761772515

_____

EVENT time: 38668.57576219977 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 38668.57576219977
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 38673.2016357921 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 38673.2016357921
Recieved ACK for last sent packet. Stopping Timer at 38673.2016357921
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 38827.90612506485  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 38827.90612506485
generateNextArrival(): future time for event 1 at entity 0 will be
39200.79348124638
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 38827.90612506485
Packet: 6 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 38827.91
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____


EVENT time: 38857.90612506485  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 38857.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
Retransmitting Packet 6
startTimer: starting timer at 38857.90612506485
Starting timer for packet 6 at time 38857.90612506485
_____


EVENT time: 38887.90612506485  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 38887.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 38887.90612506485
Starting timer for packet 6 at time 38887.90612506485
_____


EVENT time: 38890.6447645497  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6       rcv_end: 13
Packet received is not corrupt. At time 38890.6447645497
```

Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 38900.36185796686 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 38900.36185796686
Recieved ACK for last sent packet. Stopping Timer at 38900.36185796686
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 39200.79348124638 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39200.79348124638
generateNextArrival(): future time for event 1 at entity 0 will be
39596.21570482498
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2288 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 39200.79348124638
Packet: 7 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 39200.79
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 39208.92327646718 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 39208.92327646718
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side

In order ACK 7 Sent
_____

EVENT time: 39213.280800805696 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 39213.280800805696
Recieved ACK for last sent packet. Stopping Timer at
39213.280800805696
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 39596.21570482498 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39596.21570482498
generateNextArrival(): future time for event 1 at entity 0 will be
39596.435438093205
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2309 payload:
sssssssssssssssssss
toLayer3: packet being lost
startTimer: starting timer at 39596.21570482498
Packet: 8 With Payload: sssssssssssssssssss sent to B
Timer started at: 39596.22
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 39596.435438093205 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39596.435438093205
generateNextArrival(): future time for event 1 at entity 0 will be
39780.88930936613
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2330 payload:
ttttttttttttttttttt
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 39596.435438093205

startTimer: starting timer at 39596.435438093205
Packet: 9 With Payload: tttttttttttttttttttt sent to B
Timer started at: 39596.44
Packet added to retransmission buffer at index [1]
Next sequence number: 10
_____

EVENT time: 39601.624103518785 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 39601.624103518785
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Duplicate ACK 7 Sent

_____

EVENT time: 39611.542802209544 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 22.0

_____

EVENT time: 39626.435438093205 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 39626.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2309 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
toLayer3: seqnum: 9 acknum: 0 checksum: -2330 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 39626.435438093205
Starting timer for packet 9 at time 39626.435438093205

_____

EVENT time: 39631.23462630085 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 39631.23462630085
Packet received is in order. Delivering packet(s) to layer5

Packet 8 Message ssssssssssssssssssss delivered to Layer 5
Packet 9 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 9 Sent

_____

EVENT time: 39635.262550737025 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Cumulative ACK 9received
stopTimer: stopping timer at 39635.262550737025
Recieved ACK for last sent packet. Stopping Timer at
39635.262550737025
Sliding window 2 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 39638.54564043092 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 39638.54564043092
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 39640.09030426954 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received duplicate ACK 9
Send_Base: 10 Send_End: 1
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 39780.88930936613 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39780.88930936613
generateNextArrival(): future time for event 1 at entity 0 will be
39803.50962858974
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window

```
toLayer3: seqnum: 10  acknum: 0  checksum: -2351  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 39780.88930936613
Packet: 10 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 39780.89
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____


EVENT time: 39787.5191503647  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10        rcv_end: 1
Packet received is not corrupt. At time 39787.5191503647
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____


EVENT time: 39789.94769127476  type: 2  entity: 0
aInput()_____
Current Send_Base: 10    Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 23.0

_____


EVENT time: 39803.50962858974  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39803.50962858974
generateNextArrival(): future time for event 1 at entity 0 will be
39814.63057344279
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2372  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 39803.50962858974
startTimer: starting timer at 39803.50962858974
Packet: 11 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 39803.51
Packet added to retransmission buffer at index [1]
```

Next sequence number: 12
_____

EVENT time: 39809.64177373577 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 39809.64177373577
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message vvvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 39814.63057344279 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 39814.63057344279
generateNextArrival(): future time for event 1 at entity 0 will be
40025.90411084322
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2393 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 39814.63057344279
startTimer: starting timer at 39814.63057344279
Packet: 12 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 39814.63
Packet added to retransmission buffer at index [2]
Next sequence number: 13

_____

EVENT time: 39816.20102542192 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Cumulative ACK 11received
Sliding window 2 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 39821.188451796006 type: 2 entity: 1
bInput() _____

Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 39821.188451796006
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 39826.516373180326 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 39826.516373180326
Recieved ACK for last sent packet. Stopping Timer at
39826.516373180326
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 40025.90411084322 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40025.90411084322
generateNextArrival(): future time for event 1 at entity 0 will be
40098.72127445295
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2414 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40025.90411084322
Packet: 13 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 40025.90
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 40031.41358684041 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 40031.41358684041
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5

New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 40040.40885647144 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 40040.40885647144
Recieved ACK for last sent packet. Stopping Timer at 40040.40885647144
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 40098.72127445295 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40098.72127445295
generateNextArrival(): future time for event 1 at entity 0 will be
40112.100589007234
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2435 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40098.72127445295
Packet: 14 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 40098.72
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 40106.757408368176 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 40106.757408368176
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

```
EVENT time: 40112.100589007234  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40112.100589007234
generateNextArrival(): future time for event 1 at entity 0 will be
40358.226264229255
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2456  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 40112.100589007234
startTimer: starting timer at 40112.100589007234
Packet: 15 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 40112.10
Packet added to retransmission buffer at index [1]
Next sequence number: 0
_____


EVENT time: 40115.06765953551  type: 2  entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 40121.42381054109  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 40121.42381054109
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 0     rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____


EVENT time: 40123.482650227365  type: 2  entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
```

stopTimer: stopping timer at 40123.482650227365
Recieved ACK for last sent packet. Stopping Timer at
40123.482650227365
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 40358.226264229255 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40358.226264229255
generateNextArrival(): future time for event 1 at entity 0 will be
40730.18585772271
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1941 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40358.226264229255
Packet: 0 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 40358.23
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 40367.897213660086 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 40367.897213660086
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 40370.605090487385 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 40370.605090487385
Recieved ACK for last sent packet. Stopping Timer at
40370.605090487385
Sliding window 1 times

New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 40730.18585772271 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40730.18585772271
generateNextArrival(): future time for event 1 at entity 0 will be
40952.177495651114
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40730.18585772271
Packet: 1 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 40730.19
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 40731.50502029481 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 40731.50502029481
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 40738.80751976074 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 40738.80751976074
Recieved ACK for last sent packet. Stopping Timer at 40738.80751976074
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 40952.177495651114 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40952.177495651114
generateNextArrival(): future time for event 1 at entity 0 will be
40966.631061738946
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -1983 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40952.177495651114
Packet: 2 With Payload: cccccccccccccccccccc sent to B
Timer started at: 40952.18
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 40957.48509170812 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 40957.48509170812
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 40959.890835291604 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 40959.890835291604
Recieved ACK for last sent packet. Stopping Timer at
40959.890835291604
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 40966.631061738946 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 40966.631061738946
generateNextArrival(): future time for event 1 at entity 0 will be

41197.03360087894
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2004 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 40966.631061738946
Packet: 3 With Payload: dddddddddddddddddddd sent to B
Timer started at: 40966.63
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 40973.25980407117 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 40973.25980407117
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 40974.71657460249 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 40974.71657460249
Recieved ACK for last sent packet. Stopping Timer at 40974.71657460249
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 41197.03360087894 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 41197.03360087894
generateNextArrival(): future time for event 1 at entity 0 will be
41465.18143253884
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window

toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 41197.03360087894
Packet: 4 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 41197.03
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 41205.321604052864 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 41205.321604052864
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 41227.03360087894 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 41227.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 41227.03360087894
Starting timer for packet 4 at time 41227.03360087894

_____

EVENT time: 41228.919400616476 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 41228.919400616476
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 41232.327127903074 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11

Expected ACK 4 received
stopTimer: stopping timer at 41232.327127903074
Recieved ACK for last sent packet. Stopping Timer at
41232.327127903074
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 41465.18143253884 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 41465.18143253884
generateNextArrival(): future time for event 1 at entity 0 will be
41760.96682638021
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2046 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 41465.18143253884
Packet: 5 With Payload: ffffffffffffffffffff sent to B
Timer started at: 41465.18
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 41471.20535905027 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 41471.20535905027
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 41476.30091250344 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 41476.30091250344
Recieved ACK for last sent packet. Stopping Timer at 41476.30091250344
Sliding window 1 times

New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 41760.96682638021 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 41760.96682638021
generateNextArrival(): future time for event 1 at entity 0 will be
41972.97280800807
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2067 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 41760.96682638021
Packet: 6 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 41760.97
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 41765.60451063571 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 41765.60451063571
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 41772.89684743798 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 41772.89684743798
Recieved ACK for last sent packet. Stopping Timer at 41772.89684743798
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 41972.97280800807 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 41972.97280800807
generateNextArrival(): future time for event 1 at entity 0 will be
42142.19183935058
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2088 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 41972.97280800807
Packet: 7 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 41972.97
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 41978.18839075901 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 41978.18839075901
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 41987.29682302318 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 41987.29682302318
Recieved ACK for last sent packet. Stopping Timer at 41987.29682302318
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 42142.19183935058 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 42142.19183935058
generateNextArrival(): future time for event 1 at entity 0 will be
42513.724173711365

```
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2109  payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 42142.19183935058
Packet: 8 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 42142.19
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____


EVENT time: 42143.466780602444  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 42143.466780602444
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 42145.59593493455  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 24.0

_____


EVENT time: 42172.19183935058  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 42172.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2109  payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 42172.19183935058
Starting timer for packet 8 at time 42172.19183935058

_____
```

```
EVENT time: 42173.52775658438  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 9       rcv_end: 0
Packet received is not corrupt. At time 42173.52775658438
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____


EVENT time: 42176.20514542071  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 42176.20514542071
Recieved ACK for last sent packet. Stopping Timer at 42176.20514542071
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 42513.724173711365  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 42513.724173711365
generateNextArrival(): future time for event 1 at entity 0 will be
42571.96569719536
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2130  payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 42513.724173711365
Packet: 9 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 42513.72
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____


EVENT time: 42519.93322550128  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9       rcv_end: 0
Packet received is not corrupt. At time 42519.93322550128
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 10     rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 42526.891567735845 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 42526.891567735845
Recieved ACK for last sent packet. Stopping Timer at
42526.891567735845
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 42571.96569719536 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 42571.96569719536
generateNextArrival(): future time for event 1 at entity 0 will be
42924.22254097111
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 42571.96569719536
Packet: 10 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 42571.97
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 42580.169103061016 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 42580.169103061016
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 42581.420697653135 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 42581.420697653135
Recieved ACK for last sent packet. Stopping Timer at
42581.420697653135
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 42924.22254097111 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 42924.22254097111
generateNextArrival(): future time for event 1 at entity 0 will be
43291.982787560664
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 42924.22254097111
Packet: 11 With Payload: lllllllllllllllllll sent to B
Timer started at: 42924.22
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 42954.22254097111 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 42954.22
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 42954.22254097111
Starting timer for packet 11 at time 42954.22254097111

_____

EVENT time: 42959.43729972229 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2

Packet received is not corrupt. At time 42959.43729972229
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 42966.14487136449 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 42966.14487136449
Recieved ACK for last sent packet. Stopping Timer at 42966.14487136449
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 43291.982787560664 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 43291.982787560664
generateNextArrival(): future time for event 1 at entity 0 will be
43633.71684926909
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 43291.982787560664
Packet: 12 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 43291.98
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 43295.68276009401 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 43295.68276009401
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:

toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 43305.447645497006 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 43305.447645497006
Recieved ACK for last sent packet. Stopping Timer at
43305.447645497006
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 43633.71684926909 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 43633.71684926909
generateNextArrival(): future time for event 1 at entity 0 will be
43661.13467818232
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2214 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 43633.71684926909
Packet: 13 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 43633.72
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 43637.456923123886 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 43661.13467818232 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 43661.13467818232
generateNextArrival(): future time for event 1 at entity 0 will be

43697.988830225535
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2235 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 43661.13467818232
startTimer: starting timer at 43661.13467818232
Packet: 14 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 43661.13
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 43670.71169164099 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 43670.71169164099
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 12 Sent

_____

EVENT time: 43672.75981933043 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received duplicate ACK 12
Send_Base: 13 Send_End: 4
toLayer3: seqnum: 13 acknum: 0 checksum: -2214 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitted packet: 13 Payload: nnnnnnnnnnnnnnnnnnnn

_____

EVENT time: 43678.76479384748 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 43678.76479384748
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
Packet 14 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side

Cumulative ACK 14 Sent
_____

EVENT time: 43680.06170842617 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Cumulative ACK 14received
stopTimer: stopping timer at 43680.06170842617
Recieved ACK for last sent packet. Stopping Timer at 43680.06170842617
Sliding window 2 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 43697.988830225535 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 43697.988830225535
generateNextArrival(): future time for event 1 at entity 0 will be
44059.071626941746
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppppp
toLayer3: packet being lost
startTimer: starting timer at 43697.988830225535
Packet: 15 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 43697.99
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 43727.988830225535 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 43727.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 43727.988830225535
Starting timer for packet 15 at time 43727.988830225535

_____

EVENT time: 43731.563829462575 type: 2 entity: 1

```
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 43731.563829462575
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 0     rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 43737.46910000916  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 25.0

_____


EVENT time: 43757.988830225535  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 43757.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15  acknum: 0  checksum: -2256  payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 43757.988830225535
Starting timer for packet 15 at time 43757.988830225535

_____


EVENT time: 43767.17609179968  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 43767.17609179968
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____


EVENT time: 43776.95718253121  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 43776.95718253121
Recieved ACK for last sent packet. Stopping Timer at 43776.95718253121
```

Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 44059.071626941746 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44059.071626941746
generateNextArrival(): future time for event 1 at entity 0 will be
44283.5413678396
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2261 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44059.071626941746
Packet: 0 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 44059.07
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 44062.25083162939 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 44062.25083162939
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____

EVENT time: 44089.071626941746 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 44089.07
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2261 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
Retransmitting Packet 0
startTimer: starting timer at 44089.071626941746
Starting timer for packet 0 at time 44089.071626941746

_____

```
EVENT time: 44119.071626941746  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 44119.07
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: -2261  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 44119.071626941746
Starting timer for packet 0 at time 44119.071626941746
_____


EVENT time: 44126.94021423994  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 44126.94021423994
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____


EVENT time: 44135.383404034554  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 44135.383404034554
Recieved ACK for last sent packet. Stopping Timer at
44135.383404034554
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 44283.5413678396  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44283.5413678396
generateNextArrival(): future time for event 1 at entity 0 will be
44287.04489272744
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2282  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
```

```
startTimer: starting timer at 44283.5413678396
Packet: 1 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 44283.54
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____


EVENT time: 44287.04489272744  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44287.04489272744
generateNextArrival(): future time for event 1 at entity 0 will be
44395.32456434828
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2303  payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 44287.04489272744
startTimer: starting timer at 44287.04489272744
Packet: 2 With Payload: ssssssssssssssssssss sent to B
Timer started at: 44287.04
Packet added to retransmission buffer at index [1]
Next sequence number: 3
_____


EVENT time: 44287.604449598686  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 44287.604449598686
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 2      rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____


EVENT time: 44291.19180883206  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 44291.19180883206
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 3      rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 44296.09295937987 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 44303.54432813502 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 44303.54432813502
Recieved ACK for last sent packet. Stopping Timer at 44303.54432813502
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 44395.32456434828 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44395.32456434828
generateNextArrival(): future time for event 1 at entity 0 will be
44432.471694082466
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2324 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44395.32456434828
Packet: 3 With Payload: tttttttttttttttttttt sent to B
Timer started at: 44395.32
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 44399.02069154943 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10

Packet received is not corrupt. At time 44399.02069154943
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message tttttttttttttttttttttt delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 44405.55165257729 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 44405.55165257729
Recieved ACK for last sent packet. Stopping Timer at 44405.55165257729
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 44432.471694082466 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44432.471694082466
generateNextArrival(): future time for event 1 at entity 0 will be
44515.87267677847
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44432.471694082466
Packet: 4 With Payload: uuuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 44432.47
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 44436.85064241463 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 44436.85064241463
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message uuuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:

toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____

EVENT time: 44441.77535325175 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 26.0

_____

EVENT time: 44462.471694082466 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 44462.47
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 44462.471694082466
Starting timer for packet 4 at time 44462.471694082466

_____

EVENT time: 44465.55174413282 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 44465.55174413282
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 44492.471694082466 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 44492.47
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 44492.471694082466
Starting timer for packet 4 at time 44492.471694082466

_____

```
EVENT time: 44499.586596270645  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 5      rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 44515.87267677847  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44515.87267677847
generateNextArrival(): future time for event 1 at entity 0 will be
44574.504837183755
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2366  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 44515.87267677847
startTimer: starting timer at 44515.87267677847
Packet: 5 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 44515.87
Packet added to retransmission buffer at index [1]
Next sequence number: 6

_____


EVENT time: 44519.3974120304  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is not corrupt. At time 44519.3974120304
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 6     rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 44524.5706961272  type: 2  entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Cumulative ACK 5received
stopTimer: stopping timer at 44524.5706961272
Recieved ACK for last sent packet. Stopping Timer at 44524.5706961272
Sliding window 2 times
New send_base: 6 send_end: 13
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 44574.504837183755 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44574.504837183755
generateNextArrival(): future time for event 1 at entity 0 will be
44936.9426557207
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2387 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44574.504837183755
Packet: 6 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 44574.50
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 44577.433820612205 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 44577.433820612205
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 44584.09332560198 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 44584.09332560198
Recieved ACK for last sent packet. Stopping Timer at 44584.09332560198
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 44936.9426557207 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 44936.9426557207
generateNextArrival(): future time for event 1 at entity 0 will be
44977.2515030366
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2408 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44936.9426557207
Packet: 7 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 44936.94
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 44940.31330301828 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 44940.31330301828
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 44944.77684865871 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 44944.77684865871
Recieved ACK for last sent packet. Stopping Timer at 44944.77684865871
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 44977.2515030366 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44977.2515030366
generateNextArrival(): future time for event 1 at entity 0 will be
44980.18127994629
aOutput()_____

Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2429 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 44977.2515030366
Packet: 8 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 44977.25
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 44980.18127994629 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 44980.18127994629
generateNextArrival(): future time for event 1 at entity 0 will be
45356.047242652676
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2450 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: packet being lost
stopTimer: stopping timer at 44980.18127994629
startTimer: starting timer at 44980.18127994629
Packet: 9 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 44980.18
Packet added to retransmission buffer at index [1]
Next sequence number: 10

_____

EVENT time: 44981.63979003266 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 44981.63979003266
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 44985.64491714226 type: 2 entity: 0
aInput()_____

```
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 45010.18127994629  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 45010.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9  acknum: 0  checksum: -2450  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 45010.18127994629
Starting timer for packet 9 at time 45010.18127994629

_____


EVENT time: 45016.97894222847  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9        rcv_end: 0
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 45040.18127994629  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 45040.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9  acknum: 0  checksum: -2450  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 45040.18127994629
Starting timer for packet 9 at time 45040.18127994629

_____


EVENT time: 45042.570268868076  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9        rcv_end: 0
Packet received is not corrupt. At time 45042.570268868076
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 10      rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
```

toLayer3: packet being lost
In order ACK 9 Sent
_____

EVENT time: 45070.18127994629 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 45070.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2450 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 45070.18127994629
Starting timer for packet 9 at time 45070.18127994629

_____

EVENT time: 45072.818018128004 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 45072.818018128004
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 45076.07385479294 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 45076.07385479294
Recieved ACK for last sent packet. Stopping Timer at 45076.07385479294
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 45356.047242652676 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 45356.047242652676
generateNextArrival(): future time for event 1 at entity 0 will be
45582.140568254654
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:

aaaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 45356.047242652676
Packet: 10 With Payload: aaaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 45356.05
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 45358.614215521724 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 45358.614215521724
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message aaaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 45360.58955656607 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 45360.58955656607
Recieved ACK for last sent packet. Stopping Timer at 45360.58955656607
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 45582.140568254654 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 45582.140568254654
generateNextArrival(): future time for event 1 at entity 0 will be
45724.83291116063
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 45582.140568254654
Packet: 11 With Payload: bbbbbbbbbbbbbbbbbbbbb sent to B

Timer started at: 45582.14
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 45585.46754356518 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 45612.140568254654 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 45612.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 45612.140568254654
Starting timer for packet 11 at time 45612.140568254654

_____

EVENT time: 45620.56535538805 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 45620.56535538805
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 45623.90551469467 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Received Corrupted ACK
Number of Corruped Packets to A: 27.0

_____

EVENT time: 45642.140568254654 type: 0 entity: 0
aTimerInterrup()_____

```
TIMEOUT!!! at: 45642.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11  acknum: 0  checksum: -1972  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 45642.140568254654
Starting timer for packet 11 at time 45642.140568254654

_____


EVENT time: 45644.87646107365  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 45644.87646107365
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____


EVENT time: 45653.578386791596  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 45653.578386791596
Recieved ACK for last sent packet. Stopping Timer at
45653.578386791596
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 45724.83291116063  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 45724.83291116063
generateNextArrival(): future time for event 1 at entity 0 will be
45924.59486678672
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -1993  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 45724.83291116063
Packet: 12 With Payload: cccccccccccccccccccc sent to B
Timer started at: 45724.83
Packet added to retransmission buffer at index [0]
```

Next sequence number: 13
_____

EVENT time: 45731.786034730074 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 45731.786034730074
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 45736.639606921606 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 45736.639606921606
Recieved ACK for last sent packet. Stopping Timer at
45736.639606921606
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 45924.59486678672 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 45924.59486678672
generateNextArrival(): future time for event 1 at entity 0 will be
46049.46440015871
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2014 payload:
dddddddddddddddddddd
toLayer3: packet being lost
startTimer: starting timer at 45924.59486678672
Packet: 13 With Payload: dddddddddddddddddddd sent to B
Timer started at: 45924.59
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 45954.59486678672 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 45954.59
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2014 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 45954.59486678672
Starting timer for packet 13 at time 45954.59486678672

_____

EVENT time: 45958.9922177801 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 45958.9922177801
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 45964.72444837796 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 45964.72444837796
Recieved ACK for last sent packet. Stopping Timer at 45964.72444837796
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 46049.46440015871 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 46049.46440015871
generateNextArrival(): future time for event 1 at entity 0 will be
46086.28192999055
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side

startTimer: starting timer at 46049.46440015871
Packet: 14 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 46049.46
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 46052.036866359456 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 46052.036866359456
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 46056.39136936553 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 46056.39136936553
Recieved ACK for last sent packet. Stopping Timer at 46056.39136936553
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 46086.28192999055 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 46086.28192999055
generateNextArrival(): future time for event 1 at entity 0 will be
46157.43888668479
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2056 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 46086.28192999055
Packet: 15 With Payload: ffffffffffffffffffff sent to B
Timer started at: 46086.28
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 46093.795098727394 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 46093.795098727394
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 46095.91518906218 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 46095.91518906218
Recieved ACK for last sent packet. Stopping Timer at 46095.91518906218
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 46157.43888668479 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 46157.43888668479
generateNextArrival(): future time for event 1 at entity 0 will be
46537.83379619741
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 46157.43888668479
Packet: 0 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 46157.44
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 46166.91592150641 type: 2 entity: 1

bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 46187.43888668479 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 46187.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
ggggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 46187.43888668479
Starting timer for packet 0 at time 46187.43888668479

_____

EVENT time: 46192.32294686729 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 46192.32294686729
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 46194.00823999757 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 46194.00823999757
Recieved ACK for last sent packet. Stopping Timer at 46194.00823999757
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 46537.83379619741 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 46537.83379619741
generateNextArrival(): future time for event 1 at entity 0 will be
46699.85045930358
aOutput()_____

Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 46537.83379619741
Packet: 1 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 46537.83
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 46545.34586626791 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 46545.34586626791
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 46550.617206335664 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 46550.617206335664
Recieved ACK for last sent packet. Stopping Timer at
46550.617206335664
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 46699.85045930358 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 46699.85045930358
generateNextArrival(): future time for event 1 at entity 0 will be
47062.47138889738
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −2103 payload:

iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 46699.85045930358
Packet: 2 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 46699.85
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 46708.35435041354 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 46708.35435041354
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 46716.96810815761 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 46716.96810815761
Recieved ACK for last sent packet. Stopping Timer at 46716.96810815761
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 47062.47138889738 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 47062.47138889738
generateNextArrival(): future time for event 1 at entity 0 will be
47339.61607715081
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 47062.47138889738
Packet: 3 With Payload: jjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 47062.47

Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 47068.23328348645 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 47068.23328348645
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message jjjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 47074.90762047183 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 47074.90762047183
Recieved ACK for last sent packet. Stopping Timer at 47074.90762047183
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 47339.61607715081 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 47339.61607715081
generateNextArrival(): future time for event 1 at entity 0 will be
47421.930600909465
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 47339.61607715081
Packet: 4 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 47339.62
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 47369.61607715081 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 47369.62
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 47369.61607715081
Starting timer for packet 4 at time 47369.61607715081

_____

EVENT time: 47375.6762596515 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 47375.6762596515
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 47399.61607715081 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 47399.62
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
Retransmitting Packet 4
startTimer: starting timer at 47399.61607715081
Starting timer for packet 4 at time 47399.61607715081

_____

EVENT time: 47421.930600909465 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 47421.930600909465
generateNextArrival(): future time for event 1 at entity 0 will be
47563.866084780435
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2166 payload:
llllllllllllllllllll

toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 47421.930600909465
startTimer: starting timer at 47421.930600909465
Packet: 5 With Payload: llllllllllllllllllll sent to B
Timer started at: 47421.93
Packet added to retransmission buffer at index [1]
Next sequence number: 6
_____

EVENT time: 47430.6160466323 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 47430.6160466323
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 47435.21115756708 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Cumulative ACK 5received
stopTimer: stopping timer at 47435.21115756708
Recieved ACK for last sent packet. Stopping Timer at 47435.21115756708
Sliding window 2 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 47563.866084780435 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 47563.866084780435
generateNextArrival(): future time for event 1 at entity 0 will be
47762.76131473741
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 47563.866084780435
Packet: 6 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 47563.87

Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 47568.2972197638 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 47568.2972197638
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 47570.87682729577 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 47570.87682729577
Recieved ACK for last sent packet. Stopping Timer at 47570.87682729577
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 47762.76131473741 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 47762.76131473741
generateNextArrival(): future time for event 1 at entity 0 will be
48099.74669637137
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 47762.76131473741
Packet: 7 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 47762.76
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 47770.09567552723 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 47770.09567552723
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message nnnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 47792.76131473741 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 47792.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2208 payload:
nnnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 47792.76131473741
Starting timer for packet 7 at time 47792.76131473741

_____

EVENT time: 47794.26944792018 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 47794.26944792018
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 47796.685628833904 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 47796.685628833904
Recieved ACK for last sent packet. Stopping Timer at
47796.685628833904
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 48099.74669637137 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 48099.74669637137
generateNextArrival(): future time for event 1 at entity 0 will be
48436.036255989275
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2229 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 48099.74669637137
Packet: 8 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 48099.75
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 48104.634601886064 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 48104.634601886064
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 48111.51301614431 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 48111.51301614431
Recieved ACK for last sent packet. Stopping Timer at 48111.51301614431
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 48436.036255989275 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 48436.036255989275
generateNextArrival(): future time for event 1 at entity 0 will be
48464.43067720574
aOutput()_____

Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2250 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 48436.036255989275
Packet: 9 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 48436.04
Packet added to retransmission buffer at index [0]
Next sequence number: 10

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EVENT time: 48442.292001098685 type: 2 entity: 1
bInput() ————————————————————————
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 48442.292001098685
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

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EVENT time: 48447.68144779811 type: 2 entity: 0
aInput()————————————————————————
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 48447.68144779811
Recieved ACK for last sent packet. Stopping Timer at 48447.68144779811
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

————————————————————————

EVENT time: 48464.43067720574 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 48464.43067720574
generateNextArrival(): future time for event 1 at entity 0 will be
48744.84694967499
aOutput()————————————————————————
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqqqq

toLayer3: scheduling arrival on other side
startTimer: starting timer at 48464.43067720574
Packet: 10 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 48464.43
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 48465.97808771021 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 48465.97808771021
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 48471.036835840954 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 48471.036835840954
Recieved ACK for last sent packet. Stopping Timer at
48471.036835840954
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 48744.84694967499 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 48744.84694967499
generateNextArrival(): future time for event 1 at entity 0 will be
48815.137180700105
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
startTimer: starting timer at 48744.84694967499
Packet: 11 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 48744.85

Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 48774.84694967499 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 48774.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 48774.84694967499
Starting timer for packet 11 at time 48774.84694967499

_____

EVENT time: 48778.60982085636 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 48804.84694967499 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 48804.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 48804.84694967499
Starting timer for packet 11 at time 48804.84694967499

_____

EVENT time: 48807.220557267996 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 48807.220557267996
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 48812.928342539766 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 48812.928342539766
Recieved ACK for last sent packet. Stopping Timer at
48812.928342539766
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 48815.137180700105 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 48815.137180700105
generateNextArrival(): future time for event 1 at entity 0 will be
49202.3071993164
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2313 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 48815.137180700105
Packet: 12 With Payload: sssssssssssssssssssss sent to B
Timer started at: 48815.14
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 48817.138889736634 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 48817.138889736634
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 48823.95083468124 type: 2 entity: 0
aInput()_____

Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 48823.95083468124
Recieved ACK for last sent packet. Stopping Timer at 48823.95083468124
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 49202.3071993164 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 49202.3071993164
generateNextArrival(): future time for event 1 at entity 0 will be
49394.32966093937
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2334 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 49202.3071993164
Packet: 13 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 49202.31
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 49208.43385113072 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 49208.43385113072
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____

EVENT time: 49210.3954588458 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 49210.3954588458
Recieved ACK for last sent packet. Stopping Timer at 49210.3954588458
Sliding window 1 times

New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 49394.32966093937 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 49394.32966093937
generateNextArrival(): future time for event 1 at entity 0 will be
49739.786980803874
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 49394.32966093937
Packet: 14 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 49394.33
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 49396.14514603108 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 49396.14514603108
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 49397.48490859707 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 49397.48490859707
Recieved ACK for last sent packet. Stopping Timer at 49397.48490859707
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 49739.786980803874 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 49739.786980803874
generateNextArrival(): future time for event 1 at entity 0 will be
50003.44248786891
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2376 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 49739.786980803874
Packet: 15 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 49739.79
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 49746.45774712365 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 49746.45774712365
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
In order ACK 15 Sent

_____

EVENT time: 49769.786980803874 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 49769.79
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2376 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 49769.786980803874
Starting timer for packet 15 at time 49769.786980803874

_____

EVENT time: 49772.58659627065 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 49772.58659627065

toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent
_____

EVENT time: 49781.1336100345 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 49781.1336100345
Recieved ACK for last sent packet. Stopping Timer at 49781.1336100345
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50003.44248786891 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50003.44248786891
generateNextArrival(): future time for event 1 at entity 0 will be
50214.2643513291
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2381 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50003.44248786891
Packet: 0 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 50003.44
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 50009.14285714288 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 50009.14285714288
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 50016.497543260004 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 50016.497543260004
Recieved ACK for last sent packet. Stopping Timer at
50016.497543260004
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50214.2643513291 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50214.2643513291
generateNextArrival(): future time for event 1 at entity 0 will be
50296.224860377835
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50214.2643513291
Packet: 1 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 50214.26
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 50216.024353770576 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 50216.024353770576
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 50218.73689992982 type: 2 entity: 0
aInput()_____

Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 28.0
_____

EVENT time: 50244.2643513291 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 50244.26
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 50244.2643513291
Starting timer for packet 1 at time 50244.2643513291

_____

EVENT time: 50245.98782311474 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 50245.98782311474
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 50247.399273659496 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 50247.399273659496
Recieved ACK for last sent packet. Stopping Timer at
50247.399273659496
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50296.224860377835 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50296.224860377835
generateNextArrival(): future time for event 1 at entity 0 will be
50486.0988189337
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2

NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50296.224860377835
Packet: 2 With Payload: yyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 50296.22
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 50298.08868678856 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 50298.08868678856
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message yyyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being lost
In order ACK 2 Sent

_____

EVENT time: 50326.224860377835 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 50326.22
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 50326.224860377835
Starting timer for packet 2 at time 50326.224860377835

_____

EVENT time: 50332.3526108585 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 50332.3526108585
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 50356.224860377835 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 50356.22
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 50356.224860377835
Starting timer for packet 2 at time 50356.224860377835

_____

EVENT time: 50360.15060884428 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 50360.15060884428
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 50363.634144108415 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 50363.634144108415
Recieved ACK for last sent packet. Stopping Timer at
50363.634144108415
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50486.0988189337 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50486.0988189337
generateNextArrival(): future time for event 1 at entity 0 will be
50573.55265968812
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2444 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50486.0988189337
Packet: 3 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 50486.10
Packet added to retransmission buffer at index [0]

Next sequence number: 4
_____

EVENT time: 50491.531113620425 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 50491.531113620425
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 50496.77636036257 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 50496.77636036257
Recieved ACK for last sent packet. Stopping Timer at 50496.77636036257
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50573.55265968812 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50573.55265968812
generateNextArrival(): future time for event 1 at entity 0 will be
50738.267159031966
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50573.55265968812
Packet: 4 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 50573.55
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 50580.25995666374 type: 2 entity: 1

bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 50580.25995666374
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 50583.34330271312 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 50583.34330271312
Recieved ACK for last sent packet. Stopping Timer at 50583.34330271312
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50738.267159031966 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50738.267159031966
generateNextArrival(): future time for event 1 at entity 0 will be
50797.875911740484
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −1966 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50738.267159031966
Packet: 5 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 50738.27
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 50747.14404736474 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 50747.14404736474
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5

New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 50749.87334818568 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 50749.87334818568
Recieved ACK for last sent packet. Stopping Timer at 50749.87334818568
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 50797.875911740484 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50797.875911740484
generateNextArrival(): future time for event 1 at entity 0 will be
50946.354564043104
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1987 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50797.875911740484
Packet: 6 With Payload: cccccccccccccccccccc sent to B
Timer started at: 50797.88
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 50801.760460219135 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 50801.760460219135
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

```
EVENT time: 50810.22013000886  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 50810.22013000886
Recieved ACK for last sent packet. Stopping Timer at 50810.22013000886
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 50946.354564043104  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 50946.354564043104
generateNextArrival(): future time for event 1 at entity 0 will be
51039.374980925946
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2008  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 50946.354564043104
Packet: 7 With Payload: dddddddddddddddddddd sent to B
Timer started at: 50946.35
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 50951.91567735833  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7        rcv_end: 14
Packet received is not corrupt. At time 50951.91567735833
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 8     rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____


EVENT time: 50955.39564195686  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
```

Expected ACK 7 received
stopTimer: stopping timer at 50955.39564195686
Recieved ACK for last sent packet. Stopping Timer at 50955.39564195686
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 51039.374980925946 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51039.374980925946
generateNextArrival(): future time for event 1 at entity 0 will be
51148.88760032962
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 51039.374980925946
Packet: 8 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 51039.37
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 51048.77785576954 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 51048.77785576954
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being lost
In order ACK 8 Sent
_____

EVENT time: 51069.374980925946 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 51069.37
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8

startTimer: starting timer at 51069.374980925946
Starting timer for packet 8 at time 51069.374980925946
_____

EVENT time: 51072.208655049304 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 51072.208655049304
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 51076.5290993988 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 29.0

_____

EVENT time: 51099.374980925946 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 51099.37
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: −2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 51099.374980925946
Starting timer for packet 8 at time 51099.374980925946
_____

EVENT time: 51106.20203253275 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 51106.20203253275
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 51129.374980925946 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 51129.37

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 51129.374980925946
Starting timer for packet 8 at time 51129.374980925946
——————————————————————————

EVENT time: 51132.93954283274 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 51132.93954283274
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK8 Sent

——————————————————————————

EVENT time: 51148.88760032962 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51148.88760032962
generateNextArrival(): future time for event 1 at entity 0 will be
51530.10040589619
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 51148.88760032962
startTimer: starting timer at 51148.88760032962
Packet: 9 With Payload: ffffffffffffffffffff sent to B
Timer started at: 51148.89
Packet added to retransmission buffer at index [1]
Next sequence number: 10

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EVENT time: 51157.368968779585 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 51157.368968779585
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being corrupted

toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 51161.11069063389 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 30.0

_____

EVENT time: 51178.88760032962 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 51178.89
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: −2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
toLayer3: seqnum: 9 acknum: 0 checksum: −2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 51178.88760032962
Starting timer for packet 9 at time 51178.88760032962

_____

EVENT time: 51188.00070192573 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 51188.00070192573
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 51191.63008514666 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 51191.63008514666
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 51196.622699667365 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Cumulative ACK 9received
stopTimer: stopping timer at 51196.622699667365
Recieved ACK for last sent packet. Stopping Timer at
51196.622699667365
Sliding window 2 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 51198.4115421003 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received duplicate ACK 9
Send_Base: 10 Send_End: 1
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 51530.10040589619 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51530.10040589619
generateNextArrival(): future time for event 1 at entity 0 will be
51571.42246772669
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2071 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 51530.10040589619
Packet: 10 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 51530.10
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 51537.483932004776 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 51537.483932004776
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:

toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 51540.602710043655 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 51540.602710043655
Recieved ACK for last sent packet. Stopping Timer at
51540.602710043655
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 51571.42246772669 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51571.42246772669
generateNextArrival(): future time for event 1 at entity 0 will be
51849.29960020754
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2092 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 51571.42246772669
Packet: 11 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 51571.42
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 51575.01120029299 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 51575.01120029299
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 51582.88637958923 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 51582.88637958923
Recieved ACK for last sent packet. Stopping Timer at 51582.88637958923
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

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EVENT time: 51849.29960020754 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51849.29960020754
generateNextArrival(): future time for event 1 at entity 0 will be
51988.62269966736
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2113 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 51849.29960020754
Packet: 12 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 51849.30
Packet added to retransmission buffer at index [0]
Next sequence number: 13

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EVENT time: 51857.703512680455 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 51857.703512680455
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

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EVENT time: 51863.3780632954 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received

stopTimer: stopping timer at 51863.3780632954
Recieved ACK for last sent packet. Stopping Timer at 51863.3780632954
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 51988.62269966736 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 51988.62269966736
generateNextArrival(): future time for event 1 at entity 0 will be
52306.0518204291
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 51988.62269966736
Packet: 13 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 51988.62
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 51993.86986907561 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 51993.86986907561
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 51995.83834345532 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 51995.83834345532
Recieved ACK for last sent packet. Stopping Timer at 51995.83834345532
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 52306.0518204291 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 52306.0518204291
generateNextArrival(): future time for event 1 at entity 0 will be
52528.31202124089
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2155 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 52306.0518204291
Packet: 14 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 52306.05
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 52312.77202673422 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 52312.77202673422
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 52318.58693197425 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 52318.58693197425
Recieved ACK for last sent packet. Stopping Timer at 52318.58693197425
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 52528.31202124089 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 52528.31202124089
generateNextArrival(): future time for event 1 at entity 0 will be
52634.65071565905
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 52528.31202124089
Packet: 15 With Payload: llllllllllllllllll sent to B
Timer started at: 52528.31
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 52531.44068727684 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 52531.44068727684
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
In order ACK 15 Sent
_____

EVENT time: 52558.31202124089 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 52558.31
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 52558.31202124089
Starting timer for packet 15 at time 52558.31202124089
_____

EVENT time: 52564.14615314189 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 52564.14615314189
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side

Packet received is outside of window. ACK15 Sent
_____

EVENT time: 52572.130649739076 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 52572.130649739076
Recieved ACK for last sent packet. Stopping Timer at
52572.130649739076
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 52634.65071565905 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 52634.65071565905
generateNextArrival(): future time for event 1 at entity 0 will be
52692.635883663446
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2181 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 52634.65071565905
Packet: 0 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 52634.65
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 52642.08011108738 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 52642.08011108738
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 52645.33100375378 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 31.0

_____

EVENT time: 52664.65071565905 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 52664.65
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2181 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 52664.65071565905
Starting timer for packet 0 at time 52664.65071565905

_____

EVENT time: 52668.644032105476 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 52668.644032105476
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 52675.90670491654 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 52675.90670491654
Recieved ACK for last sent packet. Stopping Timer at 52675.90670491654
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 52692.635883663446 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 52692.635883663446
generateNextArrival(): future time for event 1 at entity 0 will be
52889.675588244274
aOutput()_____

Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2202 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 52692.635883663446
Packet: 1 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 52692.64
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 52696.99505600147 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 52696.99505600147
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 52699.088503677485 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 52699.088503677485
Recieved ACK for last sent packet. Stopping Timer at
52699.088503677485
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 52889.675588244274 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 52889.675588244274
generateNextArrival(): future time for event 1 at entity 0 will be
53057.01467940306
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:

ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 52889.675588244274
Packet: 2 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 52889.68
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 52895.183965575125 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 52895.183965575125
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being lost
In order ACK 2 Sent
_____

EVENT time: 52919.675588244274 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 52919.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 52919.675588244274
Starting timer for packet 2 at time 52919.675588244274
_____

EVENT time: 52927.217596972565 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 52927.217596972565
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 52932.12060914945 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received

stopTimer: stopping timer at 52932.12060914945
Recieved ACK for last sent packet. Stopping Timer at 52932.12060914945
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 53057.01467940306 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 53057.01467940306
generateNextArrival(): future time for event 1 at entity 0 will be
53430.19501327555
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 53057.01467940306
Packet: 3 With Payload: pppppppppppppppppppp sent to B
Timer started at: 53057.01
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 53062.70873134556 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 53062.70873134556
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 53064.883205664235 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 53064.883205664235
Recieved ACK for last sent packet. Stopping Timer at
53064.883205664235
Sliding window 1 times
New send_base: 4 send_end: 11

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 53430.19501327555 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 53430.19501327555
generateNextArrival(): future time for event 1 at entity 0 will be
53569.225135044406
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2265 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 53430.19501327555
Packet: 4 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 53430.20
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 53436.356273079626 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 53436.356273079626
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 53460.19501327555 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 53460.20
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: −2265 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 53460.19501327555
Starting timer for packet 4 at time 53460.19501327555

_____

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EVENT time: 53466.79189428388  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 53466.79189428388
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____


EVENT time: 53468.13000885036  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 53468.13000885036
Recieved ACK for last sent packet. Stopping Timer at 53468.13000885036
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 53569.225135044406  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 53569.225135044406
generateNextArrival(): future time for event 1 at entity 0 will be
53731.57139805292
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2286  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 53569.225135044406
Packet: 5 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 53569.23
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____


EVENT time: 53575.44627216407  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 53575.44627216407
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 53582.82348094119 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 53582.82348094119
Recieved ACK for last sent packet. Stopping Timer at 53582.82348094119
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 53731.57139805292 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 53731.57139805292
generateNextArrival(): future time for event 1 at entity 0 will be
53972.19153416547
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2307 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 53731.57139805292
Packet: 6 With Payload: sssssssssssssssssssss sent to B
Timer started at: 53731.57
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 53734.678365428634 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 53734.678365428634
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

```
EVENT time: 53744.487472151864  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 53744.487472151864
Recieved ACK for last sent packet. Stopping Timer at
53744.487472151864
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 53972.19153416547  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 53972.19153416547
generateNextArrival(): future time for event 1 at entity 0 will be
54169.87823114719
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2328  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 53972.19153416547
Packet: 7 With Payload: tttttttttttttttttttt sent to B
Timer started at: 53972.19
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____


EVENT time: 53976.29993591113  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 53976.29993591113
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 8     rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 53983.08908352916  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
```

stopTimer: stopping timer at 53983.08908352916
Recieved ACK for last sent packet. Stopping Timer at 53983.08908352916
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 54169.87823114719 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 54169.87823114719
generateNextArrival(): future time for event 1 at entity 0 will be
54476.503799554426
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being lost
startTimer: starting timer at 54169.87823114719
Packet: 8 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 54169.88
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 54199.87823114719 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 54199.88
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: −2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 54199.87823114719
Starting timer for packet 8 at time 54199.87823114719
_____

EVENT time: 54201.46244697409 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 54201.46244697409
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: packet being lost

In order ACK 8 Sent
_____

EVENT time: 54229.87823114719 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 54229.88
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 54229.87823114719
Starting timer for packet 8 at time 54229.87823114719

_____

EVENT time: 54238.54554887539 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 54238.54554887539
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 54248.06845301675 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 54248.06845301675
Recieved ACK for last sent packet. Stopping Timer at 54248.06845301675
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 54476.503799554426 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 54476.503799554426
generateNextArrival(): future time for event 1 at entity 0 will be
54500.29602954191
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2370 payload:
vvvvvvvvvvvvvvvvvvvv

toLayer3: scheduling arrival on other side
startTimer: starting timer at 54476.503799554426
Packet: 9 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 54476.50
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 54482.34342478713 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 54482.34342478713
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 54488.6615192114 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 54488.6615192114
Recieved ACK for last sent packet. Stopping Timer at 54488.6615192114
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 54500.29602954191 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 54500.29602954191
generateNextArrival(): future time for event 1 at entity 0 will be
54575.09079256569
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2391 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 54500.29602954191
Packet: 10 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 54500.30
Packet added to retransmission buffer at index [0]

Next sequence number: 11
_____

EVENT time: 54507.823206274596 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 54507.823206274596
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 54514.97738578447 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 32.0

_____

EVENT time: 54530.29602954191 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 54530.30
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: −2391 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
Retransmitting Packet 10
startTimer: starting timer at 54530.29602954191
Starting timer for packet 10 at time 54530.29602954191

_____

EVENT time: 54560.29602954191 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 54560.30
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: −2391 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
Retransmitting Packet 10
startTimer: starting timer at 54560.29602954191
Starting timer for packet 10 at time 54560.29602954191

_____

```
EVENT time: 54575.09079256569  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 54575.09079256569
generateNextArrival(): future time for event 1 at entity 0 will be
54810.85238196966
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2412  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 54575.09079256569
startTimer: starting timer at 54575.09079256569
Packet: 11 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 54575.09
Packet added to retransmission buffer at index [1]
Next sequence number: 12

_____


EVENT time: 54577.201544236574  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11      rcv_end: 2
Packet received is not corrupt. At time 54577.201544236574
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: packet being lost
In order ACK 11 Sent

_____


EVENT time: 54605.09079256569  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 54605.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2391  payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
toLayer3: seqnum: 11  acknum: 0  checksum: -2412  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 54605.09079256569
Starting timer for packet 11 at time 54605.09079256569
```

_____

EVENT time: 54606.13061922055 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 54606.13061922055
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 54608.93243202002 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 54608.93243202002
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 54612.48908963286 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Cumulative ACK 11received
stopTimer: stopping timer at 54612.48908963286
Recieved ACK for last sent packet. Stopping Timer at 54612.48908963286
Sliding window 2 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 54617.12320322275 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received duplicate ACK 11
Send_Base: 12 Send_End: 3
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 54810.85238196966 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 54810.85238196966
generateNextArrival(): future time for event 1 at entity 0 will be
55086.08050782799
aOutput()_____

Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 54810.85238196966
Packet: 12 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 54810.85
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 54813.56712546158 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 54813.56712546158
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 54816.44886623736 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 54816.44886623736
Recieved ACK for last sent packet. Stopping Timer at 54816.44886623736
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 55086.08050782799 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55086.08050782799
generateNextArrival(): future time for event 1 at entity 0 will be
55087.44773705251
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2454 payload:
zzzzzzzzzzzzzzzzzzzz

toLayer3: scheduling arrival on other side
startTimer: starting timer at 55086.08050782799
Packet: 13 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 55086.08
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 55087.44773705251 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55087.44773705251
generateNextArrival(): future time for event 1 at entity 0 will be
55091.53721732229
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1955 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 55087.44773705251
startTimer: starting timer at 55087.44773705251
Packet: 14 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 55087.45
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 55091.37134922329 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 55091.37134922329
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 55091.53721732229 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55091.53721732229
generateNextArrival(): future time for event 1 at entity 0 will be
55288.96755882441
aOutput()_____
Send_Base: 13 Send_end: 4

NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 55091.53721732229
startTimer: starting timer at 55091.53721732229
Packet: 15 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 55091.54
Packet added to retransmission buffer at index [2]
Next sequence number: 0
_____

EVENT time: 55093.301919614234 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 55093.301919614234
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 55096.47013763847 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 55096.47013763847
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 55097.52101199376 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Cumulative ACK 14received
Sliding window 2 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 55101.13199255347  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 55101.13199255347
Recieved ACK for last sent packet. Stopping Timer at 55101.13199255347
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 55288.96755882441  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55288.96755882441
generateNextArrival(): future time for event 1 at entity 0 will be
55474.19049653614
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -1981  payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 55288.96755882441
Packet: 0 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 55288.97
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 55292.97378460035  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 55292.97378460035
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ccccccccccccccccccccc delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 55299.36329233679  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 55299.36329233679
```

Recieved ACK for last sent packet. Stopping Timer at 55299.36329233679
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 55474.19049653614 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55474.19049653614
generateNextArrival(): future time for event 1 at entity 0 will be
55814.32538834802
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2002 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 55474.19049653614
Packet: 1 With Payload: dddddddddddddddddddd sent to B
Timer started at: 55474.19
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 55475.47505111849 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 55475.47505111849
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 55483.82265694142 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 55483.82265694142
Recieved ACK for last sent packet. Stopping Timer at 55483.82265694142
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

```
EVENT time: 55814.32538834802  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 55814.32538834802
generateNextArrival(): future time for event 1 at entity 0 will be
56001.47709585862
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2023  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being lost
startTimer: starting timer at 55814.32538834802
Packet: 2 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 55814.33
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____


EVENT time: 55844.32538834802  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 55844.33
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2023  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 55844.32538834802
Starting timer for packet 2 at time 55844.32538834802

_____


EVENT time: 55849.33771782585  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2        rcv_end: 9
Packet received is not corrupt. At time 55849.33771782585
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 55854.19568468275  type: 2  entity: 0
aInput()_____
```

Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 55854.19568468275
Recieved ACK for last sent packet. Stopping Timer at 55854.19568468275
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 56001.47709585862 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 56001.47709585862
generateNextArrival(): future time for event 1 at entity 0 will be
56158.7939085055
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2044 payload:
fffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 56001.47709585862
Packet: 3 With Payload: fffffffffffffffffff sent to B
Timer started at: 56001.48
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 56011.343607898176 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 56011.343607898176
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message fffffffffffffffffff delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 56020.3633228553 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 33.0
_____

```
EVENT time: 56031.47709585862  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 56031.48
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 56031.47709585862
Starting timer for packet 3 at time 56031.47709585862

_____


EVENT time: 56037.27689443646  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 56037.27689443646
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____


EVENT time: 56041.01065095979  type: 2  entity: 0
aInput()_____
Current Send_Base: 3    Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 34.0

_____


EVENT time: 56061.47709585862  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 56061.48
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 56061.47709585862
Starting timer for packet 3 at time 56061.47709585862

_____


EVENT time: 56068.156102175955  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 4      rcv_end: 11
```

Packet received is not corrupt. At time 56068.156102175955
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent
_____

EVENT time: 56069.76448866236 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 56069.76448866236
Recieved ACK for last sent packet. Stopping Timer at 56069.76448866236
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 56158.7939085055 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 56158.7939085055
generateNextArrival(): future time for event 1 at entity 0 will be
56431.104464857926
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2065 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 56158.7939085055
Packet: 4 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 56158.79
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 56164.86947233496 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 56164.86947233496
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____

EVENT time: 56173.12698751792 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 56173.12698751792
Recieved ACK for last sent packet. Stopping Timer at 56173.12698751792
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 56431.104464857926 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 56431.104464857926
generateNextArrival(): future time for event 1 at entity 0 will be
56818.64070558793
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2086 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 56431.104464857926
Packet: 5 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 56431.10
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 56438.85604419079 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 56438.85604419079
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 56440.32764671772 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12

Expected ACK 5 received
stopTimer: stopping timer at 56440.32764671772
Recieved ACK for last sent packet. Stopping Timer at 56440.32764671772
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 56818.64070558793 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 56818.64070558793
generateNextArrival(): future time for event 1 at entity 0 will be
57075.740836817524
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 56818.64070558793
Packet: 6 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 56818.64
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 56825.03103732413 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 56825.03103732413
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 56827.23325296792 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 56827.23325296792
Recieved ACK for last sent packet. Stopping Timer at 56827.23325296792
Sliding window 1 times
New send_base: 7 send_end: 14

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 57075.740836817524 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 57075.740836817524
generateNextArrival(): future time for event 1 at entity 0 will be
57221.39957884456
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2128 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 57075.740836817524
Packet: 7 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 57075.74
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 57084.30652790917 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 57084.30652790917
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 57092.10095522934 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 57092.10095522934
Recieved ACK for last sent packet. Stopping Timer at 57092.10095522934
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 57221.39957884456 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 57221.39957884456
generateNextArrival(): future time for event 1 at entity 0 will be
57529.14822840052
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2149  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 57221.39957884456
Packet: 8 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 57221.40
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 57251.39957884456  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 57251.40
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2149  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 57251.39957884456
Starting timer for packet 8 at time 57251.39957884456

_____


EVENT time: 57253.06619464704  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8       rcv_end: 15
Packet received is not corrupt. At time 57253.06619464704
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 9     rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 57256.789513840136  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 57256.789513840136
```

Recieved ACK for last sent packet. Stopping Timer at
57256.789513840136
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 57529.14822840052 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 57529.14822840052
generateNextArrival(): future time for event 1 at entity 0 will be
57849.09207434308
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2170 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 57529.14822840052
Packet: 9 With Payload: lllllllllllllllllll sent to B
Timer started at: 57529.15
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 57537.55571153904 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 57537.55571153904
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 57541.2273934141 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 57541.2273934141
Recieved ACK for last sent packet. Stopping Timer at 57541.2273934141
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 57849.09207434308 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 57849.09207434308
generateNextArrival(): future time for event 1 at entity 0 will be
57985.69292275765
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 57849.09207434308
Packet: 10 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 57849.09
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 57855.5865047151 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 57855.5865047151
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 57857.03366191594 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 35.0

_____

EVENT time: 57879.09207434308 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 57879.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:

mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 57879.09207434308
Starting timer for packet 10 at time 57879.09207434308
_____

EVENT time: 57882.99914548173 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 57882.99914548173
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent
_____

EVENT time: 57891.41596728415 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 36.0
_____

EVENT time: 57909.09207434308 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 57909.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: −2191 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 57909.09207434308
Starting timer for packet 10 at time 57909.09207434308
_____

EVENT time: 57912.9977721488 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 57912.9977721488
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent
_____

```
EVENT time: 57914.14224677266  type: 2  entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 57914.14224677266
Recieved ACK for last sent packet. Stopping Timer at 57914.14224677266
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 57985.69292275765  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 57985.69292275765
generateNextArrival(): future time for event 1 at entity 0 will be
58292.904446546825
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2212  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 57985.69292275765
Packet: 11 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 57985.69
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____


EVENT time: 57988.92541276284  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11       rcv_end: 2
Packet received is not corrupt. At time 57988.92541276284
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 57994.10940885647  type: 2  entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 57994.10940885647
```

Recieved ACK for last sent packet. Stopping Timer at 57994.10940885647
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 58292.904446546825 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58292.904446546825
generateNextArrival(): future time for event 1 at entity 0 will be
58440.33326212347
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2233 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58292.904446546825
Packet: 12 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 58292.90
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 58294.757560960716 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 58294.757560960716
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 58298.589098788405 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 58298.589098788405
Recieved ACK for last sent packet. Stopping Timer at
58298.589098788405
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 58440.33326212347 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58440.33326212347
generateNextArrival(): future time for event 1 at entity 0 will be
58546.18366039002
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58440.33326212347
Packet: 13 With Payload: pppppppppppppppppppp sent to B
Timer started at: 58440.33
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 58449.23734244819 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 58449.23734244819
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 58452.74642170476 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 37.0

_____

EVENT time: 58470.33326212347 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58470.33
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:

ppppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 58470.33326212347
Starting timer for packet 13 at time 58470.33326212347

_____

EVENT time: 58478.4402600177 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 58478.4402600177
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 58480.08243049409 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 58480.08243049409
Recieved ACK for last sent packet. Stopping Timer at 58480.08243049409
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 58546.18366039002 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58546.18366039002
generateNextArrival(): future time for event 1 at entity 0 will be
58601.33671071505
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2275 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58546.18366039002
Packet: 14 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 58546.18
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 58548.888241218294 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 58548.888241218294
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: −15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 58554.73885311441 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 58554.73885311441
Recieved ACK for last sent packet. Stopping Timer at 58554.73885311441
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 58601.33671071505 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58601.33671071505
generateNextArrival(): future time for event 1 at entity 0 will be
58716.9652394177
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −2296 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58601.33671071505
Packet: 15 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 58601.34
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 58610.127079073456 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 58610.127079073456
Packet received is in order. Delivering packet(s) to layer5

Packet 15 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
In order ACK 15 Sent

_____

EVENT time: 58631.33671071505 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58631.34
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2296 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 58631.33671071505
Starting timer for packet 15 at time 58631.33671071505

_____

EVENT time: 58632.65230262154 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 58632.65230262154
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 58639.299447614976 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 58639.299447614976
Recieved ACK for last sent packet. Stopping Timer at
58639.299447614976
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 58716.9652394177 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58716.9652394177
generateNextArrival(): future time for event 1 at entity 0 will be
58843.89782403027
aOutput()_____

Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58716.9652394177
Packet: 0 With Payload: ssssssssssssssssssss sent to B
Timer started at: 58716.97
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 58719.69811090426 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 58719.69811090426
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____

EVENT time: 58746.9652394177 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58746.97
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 58746.9652394177
Starting timer for packet 0 at time 58746.9652394177

_____

EVENT time: 58751.23926511429 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 58751.23926511429
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

```
EVENT time: 58759.88296151615  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 58759.88296151615
Recieved ACK for last sent packet. Stopping Timer at 58759.88296151615
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 58843.89782403027  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58843.89782403027
generateNextArrival(): future time for event 1 at entity 0 will be
58937.24784081545
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2322  payload:
tttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 58843.89782403027
Packet: 1 With Payload: tttttttttttttttttttt sent to B
Timer started at: 58843.90
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____


EVENT time: 58873.89782403027  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58873.90
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1  acknum: 0  checksum: -2322  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 58873.89782403027
Starting timer for packet 1 at time 58873.89782403027

_____


EVENT time: 58875.36997589037  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 58875.36997589037
Packet received is in order. Delivering packet(s) to layer5
```

Packet 1 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 58883.953794976645 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 38.0

_____

EVENT time: 58903.89782403027 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58903.90
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2322 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 58903.89782403027
Starting timer for packet 1 at time 58903.89782403027

_____

EVENT time: 58911.5436567278 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 58911.5436567278
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 58913.26190984832 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 58913.26190984832
Recieved ACK for last sent packet. Stopping Timer at 58913.26190984832
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 58937.24784081545 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58937.24784081545
generateNextArrival(): future time for event 1 at entity 0 will be
58943.51023895993
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 58937.24784081545
Packet: 2 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 58937.25
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 58938.893032624284 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 58938.893032624284
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 58940.7494430372 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK
Number of Corruped Packets to A: 39.0

_____

EVENT time: 58943.51023895993 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 58943.51023895993
generateNextArrival(): future time for event 1 at entity 0 will be
59074.41022980437
aOutput()_____

Send_Base: 2 Send_end: 9
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: packet being lost
stopTimer: stopping timer at 58943.51023895993
startTimer: starting timer at 58943.51023895993
Packet: 3 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 58943.51
Packet added to retransmission buffer at index [1]
Next sequence number: 4
_____

EVENT time: 58973.51023895993 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 58973.51
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 58973.51023895993
Starting timer for packet 3 at time 58973.51023895993
_____

EVENT time: 58978.98373363445 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 58978.98373363445
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 58984.301492355116 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 58985.314188055054 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 58985.314188055054
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message vvvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 58991.84899441511 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 58991.84899441511
Recieved ACK for last sent packet. Stopping Timer at 58991.84899441511
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 59074.41022980437 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 59074.41022980437
generateNextArrival(): future time for event 1 at entity 0 will be
59314.56648457289
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 59074.41022980437
Packet: 4 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 59074.41
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 59076.495162816245 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11

Packet received is not corrupt. At time 59076.495162816245
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 59080.848567155976 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 59080.848567155976
Recieved ACK for last sent packet. Stopping Timer at
59080.848567155976
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 59314.56648457289 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 59314.56648457289
generateNextArrival(): future time for event 1 at entity 0 will be
59523.8380077517
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2406 payload:
xxxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 59314.56648457289
Packet: 5 With Payload: xxxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 59314.57
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 59315.79363383892 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 59315.79363383892
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 6   rcv_end = 13

toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 59323.40540787987 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 59323.40540787987
Recieved ACK for last sent packet. Stopping Timer at 59323.40540787987
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 59523.8380077517 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 59523.8380077517
generateNextArrival(): future time for event 1 at entity 0 will be
59805.86565752129
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 59523.8380077517
Packet: 6 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 59523.84
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 59526.91586046937 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 59526.91586046937
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

```
EVENT time: 59531.38050477614  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 59531.38050477614
Recieved ACK for last sent packet. Stopping Timer at 59531.38050477614
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 59805.86565752129  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 59805.86565752129
generateNextArrival(): future time for event 1 at entity 0 will be
60193.02346873379
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2448  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 59805.86565752129
Packet: 7 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 59805.87
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 59808.86385692923  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7       rcv_end: 14
Packet received is not corrupt. At time 59808.86385692923
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 8      rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____


EVENT time: 59818.50074770349  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
```

```
stopTimer: stopping timer at 59818.50074770349
Recieved ACK for last sent packet. Stopping Timer at 59818.50074770349
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 60193.02346873379  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60193.02346873379
generateNextArrival(): future time for event 1 at entity 0 will be
60232.099368266856
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -1949  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 60193.02346873379
Packet: 8 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 60193.02
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____


EVENT time: 60198.30524613178  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 60198.30524613178
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 9     rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____


EVENT time: 60204.34812463759  type: 2  entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 60204.34812463759
Recieved ACK for last sent packet. Stopping Timer at 60204.34812463759
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
```

_____

EVENT time: 60232.099368266856 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60232.099368266856
generateNextArrival(): future time for event 1 at entity 0 will be
60389.709158604695
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 60232.099368266856
Packet: 9 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 60232.10
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 60236.918881801816 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 60262.099368266856 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 60262.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 60262.099368266856
Starting timer for packet 9 at time 60262.099368266856

_____

EVENT time: 60265.02395702994 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 60265.02395702994
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5

New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 60266.91332743309 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 60266.91332743309
Recieved ACK for last sent packet. Stopping Timer at 60266.91332743309
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 60389.709158604695 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60389.709158604695
generateNextArrival(): future time for event 1 at entity 0 will be
60512.100589007234
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1991 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 60389.709158604695
Packet: 10 With Payload: cccccccccccccccccccc sent to B
Timer started at: 60389.71
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 60395.29609057894 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 60395.29609057894
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 60404.25647755364 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 60404.25647755364
Recieved ACK for last sent packet. Stopping Timer at 60404.25647755364
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 60512.100589007234 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60512.100589007234
generateNextArrival(): future time for event 1 at entity 0 will be
60610.5533005768
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 60512.100589007234
Packet: 11 With Payload: dddddddddddddddddddd sent to B
Timer started at: 60512.10
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 60514.62224188971 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 60514.62224188971
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 60521.59981078524 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2

Expected ACK 11 received
stopTimer: stopping timer at 60521.59981078524
Recieved ACK for last sent packet. Stopping Timer at 60521.59981078524
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 60610.5533005768 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60610.5533005768
generateNextArrival(): future time for event 1 at entity 0 will be
60802.68562883389
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 60610.5533005768
Packet: 12 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 60610.55
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 60612.05484176153 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 60612.05484176153
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 60613.15344706565 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 60613.15344706565
Recieved ACK for last sent packet. Stopping Timer at 60613.15344706565
Sliding window 1 times
New send_base: 13 send_end: 4

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 60802.68562883389 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60802.68562883389
generateNextArrival(): future time for event 1 at entity 0 will be
60807.26340525529
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2054 payload:
ffffffffffffffffffff
toLayer3: packet being lost
startTimer: starting timer at 60802.68562883389
Packet: 13 With Payload: ffffffffffffffffffff sent to B
Timer started at: 60802.69
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 60807.26340525529 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60807.26340525529
generateNextArrival(): future time for event 1 at entity 0 will be
60924.23474837489
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2075 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 60807.26340525529
startTimer: starting timer at 60807.26340525529
Packet: 14 With Payload: gggggggggggggggggggg sent to B
Timer started at: 60807.26
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 60812.783318582726 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 60812.783318582726
Packet received is in window, but out of order. Stored in buffer[1]

toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 12 Sent
_____

EVENT time: 60821.91811883908 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received duplicate ACK 12
Send_Base: 13 Send_End: 4
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitted packet: 13 Payload: ffffffffffffffffffff
_____

EVENT time: 60824.50843836788 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 60824.50843836788
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ffffffffffffffffffff delivered to Layer 5
Packet 14 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Cumulative ACK 14 Sent
_____

EVENT time: 60830.43760490738 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 40.0
_____

EVENT time: 60837.26340525529 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 60837.26
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffffff
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 13

toLayer3: seqnum: 14 acknum: 0 checksum: -2075 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 60837.26340525529
Starting timer for packet 14 at time 60837.26340525529

_____

EVENT time: 60842.078249458296 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 60844.49250770592 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 60844.49250770592
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 60849.593829157384 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Cumulative ACK 14received
stopTimer: stopping timer at 60849.593829157384
Recieved ACK for last sent packet. Stopping Timer at
60849.593829157384
Sliding window 2 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 60924.23474837489 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 60924.23474837489
generateNextArrival(): future time for event 1 at entity 0 will be
61294.35102389599
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhhh

toLayer3: scheduling arrival on other side
startTimer: starting timer at 60924.23474837489
Packet: 15 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 60924.23
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 60933.2528153325 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 60933.2528153325
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 60937.15466780602 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 60937.15466780602
Recieved ACK for last sent packet. Stopping Timer at 60937.15466780602
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 61294.35102389599 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 61294.35102389599
generateNextArrival(): future time for event 1 at entity 0 will be
61332.975249488816
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2101 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 61294.35102389599
Packet: 0 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 61294.35
Packet added to retransmission buffer at index [0]

Next sequence number: 1

_____

EVENT time: 61298.6863002411 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 61298.6863002411
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 61305.356791894286 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 41.0

_____

EVENT time: 61324.35102389599 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 61324.35
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2101 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: packet being lost
Retransmitting Packet 0
startTimer: starting timer at 61324.35102389599
Starting timer for packet 0 at time 61324.35102389599

_____

EVENT time: 61332.975249488816 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 61332.975249488816
generateNextArrival(): future time for event 1 at entity 0 will be
61671.02267525254
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2122 payload:
jjjjjjjjjjjjjjjjjjj

```
toLayer3: packet being lost
stopTimer: stopping timer at 61332.975249488816
startTimer: starting timer at 61332.975249488816
Packet: 1 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 61332.98
Packet added to retransmission buffer at index [1]
Next sequence number: 2
_____


EVENT time: 61362.975249488816  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 61362.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: -2101  payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
toLayer3: seqnum: 1  acknum: 0  checksum: -2122  payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 61362.975249488816
Starting timer for packet 1 at time 61362.975249488816
_____


EVENT time: 61366.35001678518  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 61366.35001678518
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: packet being lost
Packet received is outside of window. ACK0 Sent
_____


EVENT time: 61375.151921140176  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 61375.151921140176
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____
```

```
EVENT time: 61377.29535813471  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Cumulative ACK 1received
stopTimer: stopping timer at 61377.29535813471
Recieved ACK for last sent packet. Stopping Timer at 61377.29535813471
Sliding window 2 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 61671.02267525254  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 61671.02267525254
generateNextArrival(): future time for event 1 at entity 0 will be
61867.54966887417
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2143  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 61671.02267525254
Packet: 2 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 61671.02
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____


EVENT time: 61675.02752769555  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 61675.02752769555
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 61684.73857844783  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Received Corrupted ACK
```

Number of Corruped Packets to A: 42.0
_____

EVENT time: 61701.02267525254 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 61701.02
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 61701.02267525254
Starting timer for packet 2 at time 61701.02267525254

_____

EVENT time: 61705.73342081973 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 61705.73342081973
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 61712.78981902524 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 61712.78981902524
Recieved ACK for last sent packet. Stopping Timer at 61712.78981902524
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 61867.54966887417 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 61867.54966887417
generateNextArrival(): future time for event 1 at entity 0 will be
62070.44892727439
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2164 payload:
llllllllllllllllllll

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 61867.54966887417
Packet: 3 With Payload: lllllllllllllllllll sent to B
Timer started at: 61867.55
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 61874.198736533705  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3      rcv_end: 10
Packet received is not corrupt. At time 61874.198736533705
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 4     rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____


EVENT time: 61879.0492873928  type: 2  entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 61879.0492873928
Recieved ACK for last sent packet. Stopping Timer at 61879.0492873928
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 62070.44892727439  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62070.44892727439
generateNextArrival(): future time for event 1 at entity 0 will be
62147.24570451979
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -2185  payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62070.44892727439
Packet: 4 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 62070.45
Packet added to retransmission buffer at index [0]
```

Next sequence number: 5
_____

EVENT time: 62071.92025513473 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 62071.92025513473
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 62076.62990203558 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 62076.62990203558
Recieved ACK for last sent packet. Stopping Timer at 62076.62990203558
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 62147.24570451979 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62147.24570451979
generateNextArrival(): future time for event 1 at entity 0 will be
62335.642567217015
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2206 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62147.24570451979
Packet: 5 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 62147.25
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 62151.92541276284 type: 2 entity: 1

```
bInput() _____
Packet 5 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 62151.92541276284
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 62155.19251075777  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 62155.19251075777
Recieved ACK for last sent packet. Stopping Timer at 62155.19251075777
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 62335.642567217015  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62335.642567217015
generateNextArrival(): future time for event 1 at entity 0 will be
62387.51182592242
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2227  payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62335.642567217015
Packet: 6 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 62335.64
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____


EVENT time: 62338.09418012024  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6        rcv_end: 13
Packet received is not corrupt. At time 62338.09418012024
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ooooooooooooooooooooo delivered to Layer 5
```

New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 62346.61839655751 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 62346.61839655751
Recieved ACK for last sent packet. Stopping Timer at 62346.61839655751
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 62387.51182592242 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62387.51182592242
generateNextArrival(): future time for event 1 at entity 0 will be
62665.32792138431
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62387.51182592242
Packet: 7 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 62387.51
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 62391.1848811304 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 62417.51182592242 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 62417.51

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 62417.51182592242
Starting timer for packet 7 at time 62417.51182592242

_____

EVENT time: 62418.720572527236 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 62418.720572527236
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 62426.65453047273 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 43.0

_____

EVENT time: 62447.51182592242 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 62447.51
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 62447.51182592242
Starting timer for packet 7 at time 62447.51182592242

_____

EVENT time: 62451.72103030488 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 62451.72103030488
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:

toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent
_____

EVENT time: 62453.505478072446 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 62453.505478072446
Recieved ACK for last sent packet. Stopping Timer at
62453.505478072446
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 62665.32792138431 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62665.32792138431
generateNextArrival(): future time for event 1 at entity 0 will be
62788.25647755363
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62665.32792138431
Packet: 8 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 62665.33
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 62666.71410260322 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 62666.71410260322
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

```
EVENT time: 62673.314828943745  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 62673.314828943745
Recieved ACK for last sent packet. Stopping Timer at
62673.314828943745
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 62788.25647755363  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 62788.25647755363
generateNextArrival(): future time for event 1 at entity 0 will be
63087.25241859187
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2290  payload:
rrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 62788.25647755363
Packet: 9 With Payload: rrrrrrrrrrrrrrrrrr sent to B
Timer started at: 62788.26
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____


EVENT time: 62789.38172551652  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9       rcv_end: 0
Packet received is not corrupt. At time 62789.38172551652
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message rrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 10      rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____


EVENT time: 62793.671956541635  type: 2  entity: 0
aInput()_____
Current Send_Base: 9    Send_end: 0
```

Expected ACK 9 received
stopTimer: stopping timer at 62793.671956541635
Recieved ACK for last sent packet. Stopping Timer at
62793.671956541635
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 63087.25241859187 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63087.25241859187
generateNextArrival(): future time for event 1 at entity 0 will be
63304.92263557847
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2311 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 63087.25241859187
Packet: 10 With Payload: sssssssssssssssssssss sent to B
Timer started at: 63087.25
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 63094.94274727621 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 63094.94274727621
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 63098.15738395335 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 63098.15738395335
Recieved ACK for last sent packet. Stopping Timer at 63098.15738395335
Sliding window 1 times

New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 63304.92263557847 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63304.92263557847
generateNextArrival(): future time for event 1 at entity 0 will be
63313.626514481024
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2332 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 63304.92263557847
Packet: 11 With Payload: tttttttttttttttttttt sent to B
Timer started at: 63304.92
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 63310.64580217902 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 63310.64580217902
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 63313.626514481024 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63313.626514481024
generateNextArrival(): future time for event 1 at entity 0 will be
63392.69386883144
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2353 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side

```
stopTimer: stopping timer at 63313.626514481024
startTimer: starting timer at 63313.626514481024
Packet: 12 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 63313.63
Packet added to retransmission buffer at index [1]
Next sequence number: 13

_____


EVENT time: 63315.07583849604  type: 2  entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 63323.53093050935  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is not corrupt. At time 63323.53093050935
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 13     rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____


EVENT time: 63343.626514481024  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 63343.63
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 63343.626514481024
Starting timer for packet 12 at time 63343.626514481024

_____


EVENT time: 63352.712698751784  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 63352.712698751784
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
```

toLayer3: packet being lost
Packet received is outside of window. ACK12 Sent
_____

EVENT time: 63373.626514481024 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 63373.63
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: −2353 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 63373.626514481024
Starting timer for packet 12 at time 63373.626514481024

_____

EVENT time: 63380.40247810296 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 63380.40247810296
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 63388.299081392855 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 63388.299081392855
Recieved ACK for last sent packet. Stopping Timer at
63388.299081392855
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 63392.69386883144 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63392.69386883144
generateNextArrival(): future time for event 1 at entity 0 will be
63725.72405163731
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window

toLayer3: seqnum: 13 acknum: 0 checksum: −2374 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 63392.69386883144
Packet: 13 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 63392.69
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 63402.5826288644 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 63402.5826288644
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 63410.003234962 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 44.0

_____

EVENT time: 63422.69386883144 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 63422.69
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: −2374 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 63422.69386883144
Starting timer for packet 13 at time 63422.69386883144

_____

EVENT time: 63426.320780053094 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 63426.320780053094

toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent
_____

EVENT time: 63429.136600848404 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 63429.136600848404
Recieved ACK for last sent packet. Stopping Timer at
63429.136600848404
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 63725.72405163731 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63725.72405163731
generateNextArrival(): future time for event 1 at entity 0 will be
63984.16699728385
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 63725.72405163731
Packet: 14 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 63725.72
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 63726.919614246035 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 63726.919614246035
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

```
EVENT time: 63736.06210516678  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 63736.06210516678
Recieved ACK for last sent packet. Stopping Timer at 63736.06210516678
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 63984.16699728385  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 63984.16699728385
generateNextArrival(): future time for event 1 at entity 0 will be
64334.67818231757
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2416  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being lost
startTimer: starting timer at 63984.16699728385
Packet: 15 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 63984.17
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____


EVENT time: 64014.16699728385  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 64014.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15  acknum: 0  checksum: -2416  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 64014.16699728385
Starting timer for packet 15 at time 64014.16699728385
_____


EVENT time: 64019.33561204871  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
```

Packet received is not corrupt. At time 64019.33561204871
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 64025.896786400954 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 64025.896786400954
Recieved ACK for last sent packet. Stopping Timer at
64025.896786400954
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 64334.67818231757 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 64334.67818231757
generateNextArrival(): future time for event 1 at entity 0 will be
64381.566820276494
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 64334.67818231757
Packet: 0 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 64334.68
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 64342.27018036439 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 64364.67818231757 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 64364.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 64364.67818231757
Starting timer for packet 0 at time 64364.67818231757

_____

EVENT time: 64368.96264534439 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 64368.96264534439
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message yyyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 64372.735953856005 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 64372.735953856005
Recieved ACK for last sent packet. Stopping Timer at
64372.735953856005
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 64381.566820276494 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 64381.566820276494
generateNextArrival(): future time for event 1 at entity 0 will be
64386.31550035096
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2442 payload:

zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 64381.566820276494
Packet: 1 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 64381.57
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 64382.810174871054 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 64382.810174871054
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 64385.26206244087 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 64385.26206244087
Recieved ACK for last sent packet. Stopping Timer at 64385.26206244087
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 64386.31550035096 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 64386.31550035096
generateNextArrival(): future time for event 1 at entity 0 will be
64680.8679464095
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -1943 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 64386.31550035096
Packet: 2 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 64386.32

Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 64391.85793633838 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 64391.85793633838
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 64396.75133518478 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 64396.75133518478
Recieved ACK for last sent packet. Stopping Timer at 64396.75133518478
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 64680.8679464095 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 64680.8679464095
generateNextArrival(): future time for event 1 at entity 0 will be
64931.107516708886
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 64680.8679464095
Packet: 3 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 64680.87
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

```
EVENT time: 64687.094027527695  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3       rcv_end: 10
Packet received is not corrupt. At time 64687.094027527695
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 4      rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____


EVENT time: 64690.58909878841  type: 2  entity: 0
aInput()_____
Current Send_Base: 3    Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 64690.58909878841
Recieved ACK for last sent packet. Stopping Timer at 64690.58909878841
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 64931.107516708886  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 64931.107516708886
generateNextArrival(): future time for event 1 at entity 0 will be
65256.15405743584
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -1985  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 64931.107516708886
Packet: 4 With Payload: cccccccccccccccccccc sent to B
Timer started at: 64931.11
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____


EVENT time: 64938.19000824  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4       rcv_end: 11
Packet received is not corrupt. At time 64938.19000824
Packet received is in order. Delivering packet(s) to layer5
```

Packet 4 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 64946.74114200263 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 64946.74114200263
Recieved ACK for last sent packet. Stopping Timer at 64946.74114200263
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 65256.15405743584 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 65256.15405743584
generateNextArrival(): future time for event 1 at entity 0 will be
65578.61262855922
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2006 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 65256.15405743584
Packet: 5 With Payload: dddddddddddddddddddd sent to B
Timer started at: 65256.15
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 65265.655537583545 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 65265.655537583545
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 65268.48811304056 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 65268.48811304056
Recieved ACK for last sent packet. Stopping Timer at 65268.48811304056
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 65578.61262855922 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 65578.61262855922
generateNextArrival(): future time for event 1 at entity 0 will be
65884.05407879878
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 65578.61262855922
Packet: 6 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 65578.61
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 65579.81340983306 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 65579.81340983306
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 65585.24707785272 type: 2 entity: 0
aInput()_____

Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 65585.24707785272
Recieved ACK for last sent packet. Stopping Timer at 65585.24707785272
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
——————————————————————————————

EVENT time: 65884.05407879878 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 65884.05407879878
generateNextArrival(): future time for event 1 at entity 0 will be
65912.80251472518
aOutput()——————————————————————————————
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2048 payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 65884.05407879878
Packet: 7 With Payload: ffffffffffffffffff sent to B
Timer started at: 65884.05
Packet added to retransmission buffer at index [0]
Next sequence number: 8
——————————————————————————————

EVENT time: 65890.33344523453 type: 2 entity: 1
bInput() ——————————————————————————————
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 65890.33344523453
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

——————————————————————————————

EVENT time: 65899.12546159246 type: 2 entity: 0
aInput()——————————————————————————————
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 45.0

——————————————————————————————

EVENT time: 65912.80251472518 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 65912.80251472518
generateNextArrival(): future time for event 1 at entity 0 will be
65940.4889065218
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2069 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 65912.80251472518
startTimer: starting timer at 65912.80251472518
Packet: 8 With Payload: gggggggggggggggggggg sent to B
Timer started at: 65912.80
Packet added to retransmission buffer at index [1]
Next sequence number: 9
_____

EVENT time: 65914.72869045075 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 65914.72869045075
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 65924.54686117129 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Cumulative ACK 8received
stopTimer: stopping timer at 65924.54686117129
Recieved ACK for last sent packet. Stopping Timer at 65924.54686117129
Sliding window 2 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 65940.4889065218 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 65940.4889065218
generateNextArrival(): future time for event 1 at entity 0 will be
66070.99826044496
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 65940.4889065218
Packet: 9 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 65940.49
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 65942.115970336 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 65942.115970336
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 65945.60911893063 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 65945.60911893063
Recieved ACK for last sent packet. Stopping Timer at 65945.60911893063
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 66070.99826044496 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 66070.99826044496
generateNextArrival(): future time for event 1 at entity 0 will be
66318.73531296731
aOutput()_____
Send_Base: 10 Send_end: 1

NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2111 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 66070.99826044496
Packet: 10 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 66071.00
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 66073.15543076876 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 66073.15543076876
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 66076.19235816522 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 66076.19235816522
Recieved ACK for last sent packet. Stopping Timer at 66076.19235816522
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 66318.73531296731 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 66318.73531296731
generateNextArrival(): future time for event 1 at entity 0 will be
66698.89828180791
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost

startTimer: starting timer at 66318.73531296731
Packet: 11 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 66318.74
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 66348.73531296731 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 66348.74
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 66348.73531296731
Starting timer for packet 11 at time 66348.73531296731

_____

EVENT time: 66358.24118778038 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 66358.24118778038
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 66360.8795739616 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 66360.8795739616
Recieved ACK for last sent packet. Stopping Timer at 66360.8795739616
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 66698.89828180791 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 66698.89828180791
generateNextArrival(): future time for event 1 at entity 0 will be

66760.52125614184
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 66698.89828180791
Packet: 12 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 66698.90
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 66701.33149204993 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 66701.33149204993
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 66709.04242072816 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 66709.04242072816
Recieved ACK for last sent packet. Stopping Timer at 66709.04242072816
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 66760.52125614184 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 66760.52125614184
generateNextArrival(): future time for event 1 at entity 0 will be
66898.81893368327
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window

toLayer3: seqnum: 13 acknum: 0 checksum: −2174 payload:
llllllllllllllllll
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 66760.52125614184
Packet: 13 With Payload: llllllllllllllllll sent to B
Timer started at: 66760.52
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 66764.56675923947 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 66790.52125614184 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 66790.52
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: −2174 payload:
llllllllllllllllll
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 66790.52125614184
Starting timer for packet 13 at time 66790.52125614184

_____

EVENT time: 66794.00946073793 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 66820.52125614184 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 66820.52
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: −2174 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 66820.52125614184
Starting timer for packet 13 at time 66820.52125614184

_____

EVENT time: 66822.44990386668 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 66822.44990386668
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 66826.91180150761 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 46.0

_____

EVENT time: 66850.52125614184 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 66850.52
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 66850.52125614184
Starting timer for packet 13 at time 66850.52125614184

_____

EVENT time: 66858.93066194646 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 66858.93066194646
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 66866.42405468917 type: 2 entity: 0
aInput()_____

Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 66866.42405468917
Recieved ACK for last sent packet. Stopping Timer at 66866.42405468917
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 66898.81893368327 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 66898.81893368327
generateNextArrival(): future time for event 1 at entity 0 will be
67124.60707419048
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2195 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 66898.81893368327
Packet: 14 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 66898.82
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 66907.58568071535 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 66907.58568071535
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 66908.91363261818 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 66908.91363261818
Recieved ACK for last sent packet. Stopping Timer at 66908.91363261818
Sliding window 1 times

New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 67124.60707419048 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67124.60707419048
generateNextArrival(): future time for event 1 at entity 0 will be
67401.51982177189
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 67124.60707419048
Packet: 15 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 67124.61
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 67131.68544572282 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 67131.68544572282
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 67134.23264259772 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 67134.23264259772
Recieved ACK for last sent packet. Stopping Timer at 67134.23264259772
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 67401.51982177189 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67401.51982177189
generateNextArrival(): future time for event 1 at entity 0 will be
67800.95828119753
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2221 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 67401.51982177189
Packet: 0 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 67401.52
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 67406.7620471816 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 67406.7620471816
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 67410.36066774497 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 67410.36066774497
Recieved ACK for last sent packet. Stopping Timer at 67410.36066774497
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 67800.95828119753 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67800.95828119753
generateNextArrival(): future time for event 1 at entity 0 will be
67824.22559282203

aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2242 payload:
pppppppppppppppppppppp
toLayer3: packet being lost
startTimer: starting timer at 67800.95828119753
Packet: 1 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 67800.96
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 67824.22559282203 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67824.22559282203
generateNextArrival(): future time for event 1 at entity 0 will be
67976.08569597459
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 67824.22559282203
startTimer: starting timer at 67824.22559282203
Packet: 2 With Payload: qqqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 67824.23
Packet added to retransmission buffer at index [1]
Next sequence number: 3

_____

EVENT time: 67826.13940855126 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 67826.13940855126
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 0 Sent

_____

EVENT time: 67827.47202978603 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8

Received duplicate ACK 0
Send_Base: 1 Send_End: 8
toLayer3: seqnum: 1 acknum: 0 checksum: −2242 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitted packet: 1 Payload: ppppppppppppppppppppp

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EVENT time: 67833.52754295478 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 67833.52754295478
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ppppppppppppppppppppp delivered to Layer 5
Packet 2 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Cumulative ACK 2 Sent

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EVENT time: 67838.81563768422 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 47.0

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EVENT time: 67854.22559282203 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 67854.23
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: −2242 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
toLayer3: seqnum: 2 acknum: 0 checksum: −2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 67854.22559282203
Starting timer for packet 2 at time 67854.22559282203

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EVENT time: 67860.05752739034 type: 2 entity: 1

bInput() _____
Packet 1 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 67860.05752739034
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 67861.19705801566 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Cumulative ACK 2received
stopTimer: stopping timer at 67861.19705801566
Recieved ACK for last sent packet. Stopping Timer at 67861.19705801566
Sliding window 2 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 67862.78518021178 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 67862.78518021178
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 67864.75063325906 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received duplicate ACK 2
Send_Base: 3 Send_End: 10
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 67976.08569597459 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 67976.08569597459
generateNextArrival(): future time for event 1 at entity 0 will be
68043.92223883784
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:

rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 67976.08569597459
Packet: 3 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 67976.09
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 67982.52272103028 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 67982.52272103028
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 67991.26337473675 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 67991.26337473675
Recieved ACK for last sent packet. Stopping Timer at 67991.26337473675
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 68043.92223883784 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 68043.92223883784
generateNextArrival(): future time for event 1 at entity 0 will be
68230.21942808312
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2305 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 68043.92223883784
Packet: 4 With Payload: sssssssssssssssssss sent to B
Timer started at: 68043.92

Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 68046.10934781944 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 68046.10934781944
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 68048.2728354747 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 68048.2728354747
Recieved ACK for last sent packet. Stopping Timer at 68048.2728354747
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 68230.21942808312 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 68230.21942808312
generateNextArrival(): future time for event 1 at entity 0 will be
68625.93462935269
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 68230.21942808312
Packet: 5 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 68230.22
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 68238.67882320625 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 68238.67882320625
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 68247.62190618608 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 68247.62190618608
Recieved ACK for last sent packet. Stopping Timer at 68247.62190618608
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 68625.93462935269 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 68625.93462935269
generateNextArrival(): future time for event 1 at entity 0 will be
68759.8010193182
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 68625.93462935269
Packet: 6 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 68625.93
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 68628.39283425396 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 68628.39283425396
Packet received is in order. Delivering packet(s) to layer5

Packet 6 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 68629.47166356393 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 68629.47166356393
Recieved ACK for last sent packet. Stopping Timer at 68629.47166356393
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 68759.8010193182 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 68759.8010193182
generateNextArrival(): future time for event 1 at entity 0 will be
69016.36402478101
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 68759.8010193182
Packet: 7 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 68759.80
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 68767.13922544022 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 68767.13922544022
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 68769.01101718191 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 68769.01101718191
Recieved ACK for last sent packet. Stopping Timer at 68769.01101718191
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 69016.36402478101 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 69016.36402478101
generateNextArrival(): future time for event 1 at entity 0 will be
69234.21735282447
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2389 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 69016.36402478101
Packet: 8 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 69016.36
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 69022.33878597367 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 69022.33878597367
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 69024.12817773978 type: 2 entity: 0
aInput()_____

Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 69024.12817773978
Recieved ACK for last sent packet. Stopping Timer at 69024.12817773978
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 69234.21735282447 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 69234.21735282447
generateNextArrival(): future time for event 1 at entity 0 will be
69247.01071199682
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 69234.21735282447
Packet: 9 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 69234.22
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 69237.01312295906 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 69237.01312295906
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 69238.37650685139 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 69238.37650685139
Recieved ACK for last sent packet. Stopping Timer at 69238.37650685139
Sliding window 1 times

New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 69247.01071199682 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 69247.01071199682
generateNextArrival(): future time for event 1 at entity 0 will be
69474.80086672567
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2431 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 69247.01071199682
Packet: 10 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 69247.01
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 69254.69637134922 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 69254.69637134922
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 69257.39738151188 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 69257.39738151188
Recieved ACK for last sent packet. Stopping Timer at 69257.39738151188
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 69474.80086672567   type: 1   entity: 0
generateNextArrival(): called
generateNextArrival(): time is 69474.80086672567
generateNextArrival(): future time for event 1 at entity 0 will be
69722.72103030488
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2452 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 69474.80086672567
Packet: 11 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 69474.80
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 69478.54560991241 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 69478.54560991241
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 69485.84041871395 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 69485.84041871395
Recieved ACK for last sent packet. Stopping Timer at 69485.84041871395
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 69722.72103030488 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 69722.72103030488
generateNextArrival(): future time for event 1 at entity 0 will be
70049.4521927549

aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 69722.72103030488
Packet: 12 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 69722.72
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 69731.42240668966 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 69731.42240668966
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 69740.87032685324 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 69740.87032685324
Recieved ACK for last sent packet. Stopping Timer at 69740.87032685324
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 70049.4521927549 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70049.4521927549
generateNextArrival(): future time for event 1 at entity 0 will be
70078.74996185186
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -1974 payload:

bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70049.4521927549
Packet: 13 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 70049.45
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 70056.82473220008 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 70056.82473220008
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 70062.52015747552 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 70062.52015747552
Recieved ACK for last sent packet. Stopping Timer at 70062.52015747552
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 70078.74996185186 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70078.74996185186
generateNextArrival(): future time for event 1 at entity 0 will be
70471.3400677511
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1995 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70078.74996185186
Packet: 14 With Payload: cccccccccccccccccccc sent to B

Timer started at: 70078.75
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 70080.94064149907 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 70108.74996185186 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 70108.75
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -1995 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 70108.74996185186
Starting timer for packet 14 at time 70108.74996185186
_____

EVENT time: 70116.71001312295 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 70116.71001312295
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 70119.45963927121 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 70119.45963927121
Recieved ACK for last sent packet. Stopping Timer at 70119.45963927121
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 70471.3400677511 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70471.3400677511
generateNextArrival(): future time for event 1 at entity 0 will be
70821.26529740288
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −2016 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70471.3400677511
Packet: 15 With Payload: dddddddddddddddddddd sent to B
Timer started at: 70471.34
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 70476.04367198706 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 70476.04367198706
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 70481.07907345805 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 70481.07907345805
Recieved ACK for last sent packet. Stopping Timer at 70481.07907345805
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 70821.26529740288 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70821.26529740288
generateNextArrival(): future time for event 1 at entity 0 will be

70836.29261146886
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2021 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70821.26529740288
Packet: 0 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 70821.27
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 70823.18927579577 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 70823.18927579577
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 70831.990356151 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 70831.990356151
Recieved ACK for last sent packet. Stopping Timer at 70831.990356151
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 70836.29261146886 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70836.29261146886
generateNextArrival(): future time for event 1 at entity 0 will be
70908.86562700279
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window

toLayer3: seqnum: 1 acknum: 0 checksum: -2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70836.29261146886
Packet: 1 With Payload: ffffffffffffffffffff sent to B
Timer started at: 70836.29
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 70845.62434766686 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 70845.62434766686
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being lost
In order ACK 1 Sent

_____

EVENT time: 70866.29261146886 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 70866.29
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 70866.29261146886
Starting timer for packet 1 at time 70866.29261146886
_____

EVENT time: 70874.12247077853 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 70874.12247077853
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 70880.46830652791 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8

Expected ACK 1 received
stopTimer: stopping timer at 70880.46830652791
Recieved ACK for last sent packet. Stopping Timer at 70880.46830652791
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 70908.86562700279 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70908.86562700279
generateNextArrival(): future time for event 1 at entity 0 will be
70993.6704611347
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70908.86562700279
Packet: 2 With Payload: gggggggggggggggggggg sent to B
Timer started at: 70908.87
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 70916.85232093265 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 70916.85232093265
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 70921.36201055942 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 70921.36201055942
Recieved ACK for last sent packet. Stopping Timer at 70921.36201055942
Sliding window 1 times
New send_base: 3 send_end: 10

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 70993.6704611347 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 70993.6704611347
generateNextArrival(): future time for event 1 at entity 0 will be
71112.25318155462
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 70993.6704611347
Packet: 3 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 70993.67
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 71001.9980162969 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 71001.9980162969
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 71003.44077883237 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 71003.44077883237
Recieved ACK for last sent packet. Stopping Timer at 71003.44077883237
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 71112.25318155462 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 71112.25318155462
generateNextArrival(): future time for event 1 at entity 0 will be
71182.79976805934
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2105 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 71112.25318155462
Packet: 4 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 71112.25
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 71113.7893307291 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 71113.7893307291
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 71116.16925565356 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 71116.16925565356
Recieved ACK for last sent packet. Stopping Timer at 71116.16925565356
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 71182.79976805934 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 71182.79976805934
generateNextArrival(): future time for event 1 at entity 0 will be
71511.94799645986
aOutput()_____

Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 71182.79976805934
Packet: 5 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 71182.80
Packet added to retransmission buffer at index [0]
Next sequence number: 6
————————————————————————————

EVENT time: 71192.72505874814 type: 2 entity: 1
bInput() ————————————————————————————
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 71192.72505874814
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

————————————————————————————

EVENT time: 71201.30695516831 type: 2 entity: 0
aInput()————————————————————————————
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 71201.30695516831
Recieved ACK for last sent packet. Stopping Timer at 71201.30695516831
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

————————————————————————————

EVENT time: 71511.94799645986 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 71511.94799645986
generateNextArrival(): future time for event 1 at entity 0 will be
71842.60994293039
aOutput()————————————————————————————
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkkk

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 71511.94799645986
Packet: 6 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 71511.95
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____


EVENT time: 71514.52650532548  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6      rcv_end: 13
Packet received is not corrupt. At time 71514.52650532548
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 7     rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____


EVENT time: 71521.83202612386  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Received Corrupted ACK
Number of Corruped Packets to A: 48.0
_____


EVENT time: 71541.94799645986  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 71541.95
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2147  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 71541.94799645986
Starting timer for packet 6 at time 71541.94799645986
_____


EVENT time: 71548.22296823024  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 71548.22296823024
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: packet being lost
```

Packet received is outside of window. ACK6 Sent
_____

EVENT time: 71571.94799645986 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 71571.95
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 71571.94799645986
Starting timer for packet 6 at time 71571.94799645986

_____

EVENT time: 71576.42390209662 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 71576.42390209662
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 71580.43699453719 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 71580.43699453719
Recieved ACK for last sent packet. Stopping Timer at 71580.43699453719
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 71842.60994293039 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 71842.60994293039
generateNextArrival(): future time for event 1 at entity 0 will be
72175.92089602344
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
llllllllllllllllllll

toLayer3: scheduling arrival on other side
startTimer: starting timer at 71842.60994293039
Packet: 7 With Payload: llllllllllllllllllll sent to B
Timer started at: 71842.61
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 71851.17563402203 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 71851.17563402203
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 71872.60994293039 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 71872.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2168 payload:
llllllllllllllllllll
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 71872.60994293039
Starting timer for packet 7 at time 71872.60994293039

_____

EVENT time: 71902.60994293039 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 71902.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2168 payload:
llllllllllllllllllll
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 71902.60994293039
Starting timer for packet 7 at time 71902.60994293039

_____

EVENT time: 71932.60994293039 type: 0 entity: 0
aTimerInterrup()_____

```
TIMEOUT!!! at: 71932.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2168  payload:
lllllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 71932.60994293039
Starting timer for packet 7 at time 71932.60994293039

_____


EVENT time: 71937.23279519028  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 8       rcv_end: 15
Packet received is not corrupt. At time 71937.23279519028
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____


EVENT time: 71943.60362559893  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 71943.60362559893
Recieved ACK for last sent packet. Stopping Timer at 71943.60362559893
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 72175.92089602344  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 72175.92089602344
generateNextArrival(): future time for event 1 at entity 0 will be
72479.93408001954
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2189  payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 72175.92089602344
Packet: 8 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 72175.92
Packet added to retransmission buffer at index [0]
```

Next sequence number: 9
_____

EVENT time: 72183.38380077518 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 72205.92089602344 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 72205.92
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: −2189 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 72205.92089602344
Starting timer for packet 8 at time 72205.92089602344
_____

EVENT time: 72213.12616351817 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 72213.12616351817
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 72223.09237952819 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 72223.09237952819
Recieved ACK for last sent packet. Stopping Timer at 72223.09237952819
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 72479.93408001954 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 72479.93408001954
generateNextArrival(): future time for event 1 at entity 0 will be
72510.6234931486
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2210 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 72479.93408001954
Packet: 9 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 72479.93
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 72488.3594164861 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 72488.3594164861
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 72494.51765495773 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 72494.51765495773
Recieved ACK for last sent packet. Stopping Timer at 72494.51765495773
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 72510.6234931486 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 72510.6234931486
generateNextArrival(): future time for event 1 at entity 0 will be
72623.45652638325
aOutput()_____

Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2231 payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 72510.6234931486
Packet: 10 With Payload: oooooooooooooooooooooo sent to B
Timer started at: 72510.62
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 72517.6312753685 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 72517.6312753685
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message oooooooooooooooooooooo delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 72522.25247962889 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 72522.25247962889
Recieved ACK for last sent packet. Stopping Timer at 72522.25247962889
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 72623.45652638325 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 72623.45652638325
generateNextArrival(): future time for event 1 at entity 0 will be
72713.57158116397
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2252 payload:
pppppppppppppppppppppp

toLayer3: scheduling arrival on other side
startTimer: starting timer at 72623.45652638325
Packet: 11 With Payload: pppppppppppppppppppp sent to B
Timer started at: 72623.46
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 72626.47257911923 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 72626.47257911923
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 72634.561998352 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 72634.561998352
Recieved ACK for last sent packet. Stopping Timer at 72634.561998352
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 72713.57158116397 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 72713.57158116397
generateNextArrival(): future time for event 1 at entity 0 will be
73058.51619006926
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2273 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 72713.57158116397
Packet: 12 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 72713.57
Packet added to retransmission buffer at index [0]

Next sequence number: 13
_____

EVENT time: 72743.57158116397 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 72743.57
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2273 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 72743.57158116397
Starting timer for packet 12 at time 72743.57158116397

_____

EVENT time: 72746.63048188726 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 72746.63048188726
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 72753.92941068758 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 49.0

_____

EVENT time: 72773.57158116397 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 72773.57
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2273 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 72773.57158116397
Starting timer for packet 12 at time 72773.57158116397

_____

EVENT time: 72774.75286111026 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 72774.75286111026
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 72776.02890102848 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 72776.02890102848
Recieved ACK for last sent packet. Stopping Timer at 72776.02890102848
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 73058.51619006926 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 73058.51619006926
generateNextArrival(): future time for event 1 at entity 0 will be
73185.14358958707
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2294 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 73058.51619006926
Packet: 13 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 73058.52
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 73064.3887752922 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 73064.3887752922
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5

New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 73067.66631061738 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 73067.66631061738
Recieved ACK for last sent packet. Stopping Timer at 73067.66631061738
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 73185.14358958707 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 73185.14358958707
generateNextArrival(): future time for event 1 at entity 0 will be
73494.89425336465
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 73185.14358958707
Packet: 14 With Payload: sssssssssssssssssssss sent to B
Timer started at: 73185.14
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 73192.0615558336 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 73192.0615558336
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
In order ACK 14 Sent

_____

EVENT time: 73215.14358958707 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73215.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
ssssssssssssssssssss
toLayer3: packet being lost
Retransmitting Packet 14
startTimer: starting timer at 73215.14358958707
Starting timer for packet 14 at time 73215.14358958707

_____

EVENT time: 73245.14358958707 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73245.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 73245.14358958707
Starting timer for packet 14 at time 73245.14358958707

_____

EVENT time: 73246.63881344034 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 73246.63881344034
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 73255.181981872 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Received Corrupted ACK
Number of Corruped Packets to A: 50.0

_____

EVENT time: 73275.14358958707 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73275.14

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 73275.14358958707
Starting timer for packet 14 at time 73275.14358958707

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EVENT time: 73284.91616565445 type: 2 entity: 1
bInput() ————————————————————————————————
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 73284.91616565445
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

————————————————————————————————

EVENT time: 73288.47468489637 type: 2 entity: 0
aInput()————————————————————————————————
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 73288.47468489637
Recieved ACK for last sent packet. Stopping Timer at 73288.47468489637
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

————————————————————————————————

EVENT time: 73494.89425336465 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 73494.89425336465
generateNextArrival(): future time for event 1 at entity 0 will be
73795.45274208806
aOutput()————————————————————————————————
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 73494.89425336465
Packet: 15 With Payload: tttttttttttttttttttt sent to B
Timer started at: 73494.89
Packet added to retransmission buffer at index [0]
Next sequence number: 0

————————————————————————————————

EVENT time: 73498.20612201298 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 73498.20612201298
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ttttttttttttttttttt delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 73505.10623493147 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 51.0

_____

EVENT time: 73524.89425336465 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73524.89
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
ttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 73524.89425336465
Starting timer for packet 15 at time 73524.89425336465

_____

EVENT time: 73529.9826654866 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 73529.9826654866
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 73554.89425336465 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73554.89

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
tttttttttttttttttttt
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 73554.89425336465
Starting timer for packet 15 at time 73554.89425336465

_____

EVENT time: 73584.89425336465 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 73584.89
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 73584.89425336465
Starting timer for packet 15 at time 73584.89425336465

_____

EVENT time: 73590.8374279 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 73590.8374279
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 73592.59221167635 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 73592.59221167635
Recieved ACK for last sent packet. Stopping Timer at 73592.59221167635
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 73795.45274208806 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 73795.45274208806
generateNextArrival(): future time for event 1 at entity 0 will be
74029.01699880976

```
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2341  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 73795.45274208806
Packet: 0 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 73795.45
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 73802.57753227331  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 73802.57753227331
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 1      rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 73806.23383281959  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 73806.23383281959
Recieved ACK for last sent packet. Stopping Timer at 73806.23383281959
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 74029.01699880976  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74029.01699880976
generateNextArrival(): future time for event 1 at entity 0 will be
74159.89257484663
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2362  payload:
```

vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74029.01699880976
Packet: 1 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 74029.02
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 74031.61885433515 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 74031.61885433515
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 74036.10547196874 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 74036.10547196874
Recieved ACK for last sent packet. Stopping Timer at 74036.10547196874
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 74159.89257484663 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74159.89257484663
generateNextArrival(): future time for event 1 at entity 0 will be
74384.4599749748
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2383 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74159.89257484663
Packet: 2 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 74159.89

Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 74164.69945371867 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 74164.69945371867
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 74170.24353770561 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 74170.24353770561
Recieved ACK for last sent packet. Stopping Timer at 74170.24353770561
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 74384.4599749748 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74384.4599749748
generateNextArrival(): future time for event 1 at entity 0 will be
74667.76940214238
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74384.4599749748
Packet: 3 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 74384.46
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 74388.13330484937 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 74388.13330484937
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 74391.93572801902 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 74391.93572801902
Recieved ACK for last sent packet. Stopping Timer at 74391.93572801902
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 74667.76940214238 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74667.76940214238
generateNextArrival(): future time for event 1 at entity 0 will be
74814.16058839684
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74667.76940214238
Packet: 4 With Payload: yyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 74667.77
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 74672.67131565293 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 74672.67131565293
Packet received is in order. Delivering packet(s) to layer5

Packet 4 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 74676.20429090242 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 74676.20429090242
Recieved ACK for last sent packet. Stopping Timer at 74676.20429090242
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 74814.16058839684 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74814.16058839684
generateNextArrival(): future time for event 1 at entity 0 will be
74944.62111270483
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2446 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74814.16058839684
Packet: 5 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 74814.16
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 74823.93234046447 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 74823.93234046447
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 74832.24314096497 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 74832.24314096497
Recieved ACK for last sent packet. Stopping Timer at 74832.24314096497
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 74944.62111270483 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 74944.62111270483
generateNextArrival(): future time for event 1 at entity 0 will be
75286.28192999051
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −1947 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 74944.62111270483
Packet: 6 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 74944.62
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 74948.18485061187 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 74948.18485061187
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 74949.54521317176 type: 2 entity: 0
aInput()_____

Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 74949.54521317176
Recieved ACK for last sent packet. Stopping Timer at 74949.54521317176
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 75286.28192999051 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 75286.28192999051
generateNextArrival(): future time for event 1 at entity 0 will be
75622.77901547286
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -1968 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 75286.28192999051
Packet: 7 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 75286.28
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 75295.80675679797 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 75316.28192999051 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 75316.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -1968 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 75316.28192999051
Starting timer for packet 7 at time 75316.28192999051
_____

EVENT time: 75320.91467024747 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 75320.91467024747
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 75322.23273415322 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 75322.23273415322
Recieved ACK for last sent packet. Stopping Timer at 75322.23273415322
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 75622.77901547286 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 75622.77901547286
generateNextArrival(): future time for event 1 at entity 0 will be
76015.61326944789
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -1989 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 75622.77901547286
Packet: 8 With Payload: cccccccccccccccccccc sent to B
Timer started at: 75622.78
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 75623.99407940914 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 75623.99407940914

Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

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EVENT time: 75624.99517807548 type: 2 entity: 0
aInput()⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 75624.99517807548
Recieved ACK for last sent packet. Stopping Timer at 75624.99517807548
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

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EVENT time: 76015.61326944789 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 76015.61326944789
generateNextArrival(): future time for event 1 at entity 0 will be
76358.90987884148
aOutput()⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2010 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 76015.61326944789
Packet: 9 With Payload: dddddddddddddddddddd sent to B
Timer started at: 76015.61
Packet added to retransmission buffer at index [0]
Next sequence number: 10

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EVENT time: 76018.58235419779 type: 2 entity: 1
bInput() ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 76018.58235419779
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side

In order ACK 9 Sent

_____

EVENT time: 76023.12967314673 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 76023.12967314673
Recieved ACK for last sent packet. Stopping Timer at 76023.12967314673
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 76358.90987884148 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 76358.90987884148
generateNextArrival(): future time for event 1 at entity 0 will be
76706.637775811
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2031 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 76358.90987884148
Packet: 10 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 76358.91
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 76362.99356059446 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 76362.99356059446
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 76372.73784600357 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 10    Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 76372.73784600357
Recieved ACK for last sent packet. Stopping Timer at 76372.73784600357
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 76706.637775811  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 76706.637775811
generateNextArrival(): future time for event 1 at entity 0 will be
76884.48744163332
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2052  payload:
ffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 76706.637775811
Packet: 11 With Payload: ffffffffffffffffff sent to B
Timer started at: 76706.64
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____


EVENT time: 76716.51225318153  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11        rcv_end: 2
Packet received is not corrupt. At time 76716.51225318153
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 12       rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 76720.26468703266  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 76720.26468703266
Recieved ACK for last sent packet. Stopping Timer at 76720.26468703266
```

Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 76884.48744163332 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 76884.48744163332
generateNextArrival(): future time for event 1 at entity 0 will be
77104.86770226138
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2073 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 76884.48744163332
Packet: 12 With Payload: gggggggggggggggggggg sent to B
Timer started at: 76884.49
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 76892.52742088074 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 76892.52742088074
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____

EVENT time: 76914.48744163332 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 76914.49
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2073 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 76914.48744163332
Starting timer for packet 12 at time 76914.48744163332

_____

```
EVENT time: 76923.11877803884  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 13       rcv_end: 4
Packet received is not corrupt. At time 76923.11877803884
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: packet being lost
Packet received is outside of window. ACK12 Sent

_____


EVENT time: 76944.48744163332  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 76944.49
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2073  payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 76944.48744163332
Starting timer for packet 12 at time 76944.48744163332

_____


EVENT time: 76945.57121494183  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 13       rcv_end: 4
Packet received is not corrupt. At time 76945.57121494183
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____


EVENT time: 76948.13818781087  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 76948.13818781087
Recieved ACK for last sent packet. Stopping Timer at 76948.13818781087
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 77104.86770226138  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77104.86770226138
```

generateNextArrival(): future time for event 1 at entity 0 will be
77117.4413281655
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2094 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77104.86770226138
Packet: 13 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 77104.87
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 77107.93896298102 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 77107.93896298102
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 77117.21933652757 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 52.0

_____

EVENT time: 77117.4413281655 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77117.4413281655
generateNextArrival(): future time for event 1 at entity 0 will be
77172.96060060423
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2115 payload:
iiiiiiiiiiiiiiiiiiii

toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 77117.4413281655
startTimer: starting timer at 77117.4413281655
Packet: 14 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 77117.44
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 77125.18054750202 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 77125.18054750202
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 77130.16431165498 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Cumulative ACK 14received
stopTimer: stopping timer at 77130.16431165498
Recieved ACK for last sent packet. Stopping Timer at 77130.16431165498
Sliding window 2 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 77172.96060060423 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77172.96060060423
generateNextArrival(): future time for event 1 at entity 0 will be
77313.29691457866
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77172.96060060423
Packet: 15 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 77172.96

Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 77174.49647511212 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 77174.49647511212
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message jjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 77179.71452986232 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 53.0

_____

EVENT time: 77202.96060060423 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 77202.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 77202.96060060423
Starting timer for packet 15 at time 77202.96060060423

_____

EVENT time: 77204.81096835226 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 77204.81096835226
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK15 Sent

_____

```
EVENT time: 77232.96060060423  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 77232.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15  acknum: 0  checksum: -2136  payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 77232.96060060423
Starting timer for packet 15 at time 77232.96060060423

_____


EVENT time: 77240.72975859855  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 77240.72975859855
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____


EVENT time: 77244.57585375526  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 77244.57585375526
Recieved ACK for last sent packet. Stopping Timer at 77244.57585375526
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 77313.29691457866  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77313.29691457866
generateNextArrival(): future time for event 1 at entity 0 will be
77479.3053987243
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2141  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77313.29691457866
Packet: 0 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 77313.30
```

Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 77322.82805871758 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 77322.82805871758
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 77332.17490157778 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 77332.17490157778
Recieved ACK for last sent packet. Stopping Timer at 77332.17490157778
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 77479.3053987243 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77479.3053987243
generateNextArrival(): future time for event 1 at entity 0 will be
77504.90432447277
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2162 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77479.3053987243
Packet: 1 With Payload: llllllllllllllllllll sent to B
Timer started at: 77479.31
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 77483.8367870113 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 77483.8367870113
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 77485.3034455397 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 77485.3034455397
Recieved ACK for last sent packet. Stopping Timer at 77485.3034455397
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 77504.90432447277 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77504.90432447277
generateNextArrival(): future time for event 1 at entity 0 will be
77772.08777123323
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2183 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: packet being lost
startTimer: starting timer at 77504.90432447277
Packet: 2 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 77504.90
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 77534.90432447277 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 77534.90
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2183 payload:

mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 77534.90432447277
Starting timer for packet 2 at time 77534.90432447277
_____

EVENT time: 77537.12192144533 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 77537.12192144533
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 77538.67180394907 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 77538.67180394907
Recieved ACK for last sent packet. Stopping Timer at 77538.67180394907
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 77772.08777123323 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77772.08777123323
generateNextArrival(): future time for event 1 at entity 0 will be
77982.9218420972
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2204 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77772.08777123323
Packet: 3 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 77772.09
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 77775.50016785177 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 77775.50016785177
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 77802.08777123323 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 77802.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2204 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 77802.08777123323
Starting timer for packet 3 at time 77802.08777123323

_____

EVENT time: 77808.91674550613 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 77808.91674550613
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 77811.87868892481 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 77811.87868892481
Recieved ACK for last sent packet. Stopping Timer at 77811.87868892481
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 77982.9218420972 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 77982.9218420972
generateNextArrival(): future time for event 1 at entity 0 will be
78073.94024475841
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2225 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 77982.9218420972
Packet: 4 With Payload: oooooooooooooooooooo sent to B
Timer started at: 77982.92
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 77985.34571367531 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 77985.34571367531
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 77987.21558275091 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 77987.21558275091
Recieved ACK for last sent packet. Stopping Timer at 77987.21558275091
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 78073.94024475841 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78073.94024475841
generateNextArrival(): future time for event 1 at entity 0 will be

78318.02728354745
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2246 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 78073.94024475841
Packet: 5 With Payload: pppppppppppppppppppp sent to B
Timer started at: 78073.94
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 78079.188512833 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 78079.188512833
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being lost
In order ACK 5 Sent
_____

EVENT time: 78103.94024475841 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 78103.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2246 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 78103.94024475841
Starting timer for packet 5 at time 78103.94024475841
_____

EVENT time: 78107.48365733815 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 78107.48365733815
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent
_____

```
EVENT time: 78114.91909543135  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 78114.91909543135
Recieved ACK for last sent packet. Stopping Timer at 78114.91909543135
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 78318.02728354745  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78318.02728354745
generateNextArrival(): future time for event 1 at entity 0 will be
78333.04239020964
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 78318.02728354745
Packet: 6 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 78318.03
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____


EVENT time: 78319.5488753929  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6       rcv_end: 13
Packet received is not corrupt. At time 78319.5488753929
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 7      rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____


EVENT time: 78326.99118015073  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
```

```
Expected ACK 6 received
stopTimer: stopping timer at 78326.99118015073
Recieved ACK for last sent packet. Stopping Timer at 78326.99118015073
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 78333.04239020964  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78333.04239020964
generateNextArrival(): future time for event 1 at entity 0 will be
78532.19397564621
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2288  payload:
rrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
startTimer: starting timer at 78333.04239020964
Packet: 7 With Payload: rrrrrrrrrrrrrrrrrr sent to B
Timer started at: 78333.04
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 78363.04239020964  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 78363.04
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2288  payload:
rrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 78363.04239020964
Starting timer for packet 7 at time 78363.04239020964
_____


EVENT time: 78365.64754173404  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 78365.64754173404
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message rrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 8     rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
```

```
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 78373.02529984433  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 54.0

_____


EVENT time: 78393.04239020964  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 78393.04
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2288  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 78393.04239020964
Starting timer for packet 7 at time 78393.04239020964

_____


EVENT time: 78399.56071657458  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 8       rcv_end: 15
Packet received is not corrupt. At time 78399.56071657458
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____


EVENT time: 78407.30295724355  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 78407.30295724355
Recieved ACK for last sent packet. Stopping Timer at 78407.30295724355
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 78532.19397564621  type: 1  entity: 0
```

generateNextArrival(): called
generateNextArrival(): time is 78532.19397564621
generateNextArrival(): future time for event 1 at entity 0 will be
78569.26786095765
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2309 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 78532.19397564621
Packet: 8 With Payload: ssssssssssssssssssss sent to B
Timer started at: 78532.19
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 78535.19409772025 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 78535.19409772025
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 78545.18778038879 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 78545.18778038879
Recieved ACK for last sent packet. Stopping Timer at 78545.18778038879
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 78569.26786095765 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78569.26786095765
generateNextArrival(): future time for event 1 at entity 0 will be
78903.12814722127
aOutput()_____

Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2330 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 78569.26786095765
Packet: 9 With Payload: tttttttttttttttttttt sent to B
Timer started at: 78569.27
Packet added to retransmission buffer at index [0]
Next sequence number: 10

———————————————————————

EVENT time: 78576.6818750572 type: 2 entity: 1
bInput() ——————————————————————————
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 78576.6818750572
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

———————————————————————

EVENT time: 78585.27338480786 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 78585.27338480786
Recieved ACK for last sent packet. Stopping Timer at 78585.27338480786
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

———————————————————————

EVENT time: 78903.12814722127 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78903.12814722127
generateNextArrival(): future time for event 1 at entity 0 will be
78920.30396435436
aOutput()——————————————————————————
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2351 payload:
uuuuuuuuuuuuuuuuuuuu

```
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 78903.12814722127
Packet: 10 With Payload: uuuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 78903.13
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____


EVENT time: 78910.55726798301  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10      rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 78920.30396435436  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 78920.30396435436
generateNextArrival(): future time for event 1 at entity 0 will be
79045.45426801353
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: −2372  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 78920.30396435436
startTimer: starting timer at 78920.30396435436
Packet: 11 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 78920.30
Packet added to retransmission buffer at index [1]
Next sequence number: 12
_____


EVENT time: 78922.05023346658  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 78922.05023346658
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0  acknum: 9  checksum: −10  payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 9 Sent

_____


EVENT time: 78924.05523850213  type: 2  entity: 0
```

```
aInput()_____
Current Send_Base: 10    Send_end: 1
Received duplicate ACK 9
Send_Base: 10 Send_End: 1
toLayer3: seqnum: 10  acknum: 0  checksum: -2351  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitted packet: 10 Payload: uuuuuuuuuuuuuuuuuuuu

_____


EVENT time: 78930.4796288949  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is not corrupt. At time 78930.4796288949
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
Packet 11 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 11 Sent

_____


EVENT time: 78938.07327494123  type: 2  entity: 0
aInput()_____
Current Send_Base: 10    Send_end: 1
Cumulative ACK 11received
stopTimer: stopping timer at 78938.07327494123
Recieved ACK for last sent packet. Stopping Timer at 78938.07327494123
Sliding window 2 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 79045.45426801353  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79045.45426801353
generateNextArrival(): future time for event 1 at entity 0 will be
79086.23920407725
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2393  payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 79045.45426801353
```

Packet: 12 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 79045.45
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 79049.03585924862 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 79049.03585924862
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 79050.13776055176 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 79050.13776055176
Recieved ACK for last sent packet. Stopping Timer at 79050.13776055176
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 79086.23920407725 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79086.23920407725
generateNextArrival(): future time for event 1 at entity 0 will be
79367.4367503891
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2414 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 79086.23920407725
Packet: 13 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 79086.24
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

```
EVENT time: 79095.75963621934  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 79095.75963621934
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 14      rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____


EVENT time: 79098.3430890835  type: 2  entity: 0
aInput()_____
Current Send_Base: 13    Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 79098.3430890835
Recieved ACK for last sent packet. Stopping Timer at 79098.3430890835
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 79367.4367503891  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79367.4367503891
generateNextArrival(): future time for event 1 at entity 0 will be
79752.97097689747
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2435  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 79367.4367503891
Packet: 14 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 79367.44
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 79368.45844904933  type: 2  entity: 1
bInput() _____
```

Packet 999999 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 79397.4367503891 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 79397.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2435 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 79397.4367503891
Starting timer for packet 14 at time 79397.4367503891

_____

EVENT time: 79405.14520706807 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 79405.14520706807
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message yyyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 79415.07187108979 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 79415.07187108979
Recieved ACK for last sent packet. Stopping Timer at 79415.07187108979
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 79752.97097689747 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79752.97097689747
generateNextArrival(): future time for event 1 at entity 0 will be
79864.21704763938
aOutput()_____
Send_Base: 15 Send_end: 6

NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2456 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 79752.97097689747
Packet: 15 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 79752.97
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 79758.68288216802 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 79758.68288216802
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 79760.1217993713 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 79760.1217993713
Recieved ACK for last sent packet. Stopping Timer at 79760.1217993713
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 79864.21704763938 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79864.21704763938
generateNextArrival(): future time for event 1 at entity 0 will be
79908.63979003264
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1941 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side

startTimer: starting timer at 79864.21704763938
Packet: 0 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 79864.22
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 79871.78789635914 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 79871.78789635914
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 79878.82918790246 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 79878.82918790246
Recieved ACK for last sent packet. Stopping Timer at 79878.82918790246
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 79908.63979003264 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 79908.63979003264
generateNextArrival(): future time for event 1 at entity 0 will be
80092.0438245796
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 79908.63979003264
Packet: 1 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 79908.64
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 79912.16287728505 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 79912.16287728505
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: –2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 79920.01278725544 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 79920.01278725544
Recieved ACK for last sent packet. Stopping Timer at 79920.01278725544
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 80092.0438245796 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80092.0438245796
generateNextArrival(): future time for event 1 at entity 0 will be
80115.55528427991
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: –1983 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80092.0438245796
Packet: 2 With Payload: cccccccccccccccccccc sent to B
Timer started at: 80092.04
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 80096.61503952146 type: 2 entity: 1
bInput() _____

```
Packet 2 received. rcv_base: 2        rcv_end: 9
Packet received is not corrupt. At time 80096.61503952146
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 3      rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 80101.57023834955  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 80101.57023834955
Recieved ACK for last sent packet. Stopping Timer at 80101.57023834955
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 80115.55528427991  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80115.55528427991
generateNextArrival(): future time for event 1 at entity 0 will be
80183.48948637348
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2004  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80115.55528427991
Packet: 3 With Payload: dddddddddddddddddddd sent to B
Timer started at: 80115.56
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 80121.74181340983  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3        rcv_end: 10
Packet received is not corrupt. At time 80121.74181340983
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 4      rcv_end = 11
```

toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 80130.81618701742 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 80130.81618701742
Recieved ACK for last sent packet. Stopping Timer at 80130.81618701742
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 80183.48948637348 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80183.48948637348
generateNextArrival(): future time for event 1 at entity 0 will be
80223.68846705527
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80183.48948637348
Packet: 4 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 80183.49
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 80187.41990417188 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 80187.41990417188
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 80196.56074709311 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 80196.56074709311
Recieved ACK for last sent packet. Stopping Timer at 80196.56074709311
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 80223.68846705527 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80223.68846705527
generateNextArrival(): future time for event 1 at entity 0 will be
80524.84511856441
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2046 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80223.68846705527
Packet: 5 With Payload: ffffffffffffffffffff sent to B
Timer started at: 80223.69
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 80232.69005401776 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 80232.69005401776
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 80242.29453413496 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received

stopTimer: stopping timer at 80242.29453413496
Recieved ACK for last sent packet. Stopping Timer at 80242.29453413496
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 80524.84511856441 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80524.84511856441
generateNextArrival(): future time for event 1 at entity 0 will be
80676.1558885464
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2067 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80524.84511856441
Packet: 6 With Payload: gggggggggggggggggggg sent to B
Timer started at: 80524.85
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 80528.53492843409 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 80528.53492843409
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 80536.12005981627 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Received Corrupted ACK
Number of Corruped Packets to A: 55.0
_____

```
EVENT time: 80554.84511856441  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 80554.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2067  payload:
gggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 80554.84511856441
Starting timer for packet 6 at time 80554.84511856441

_____


EVENT time: 80559.06942960905  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 7       rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 80584.84511856441  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 80584.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2067  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 80584.84511856441
Starting timer for packet 6 at time 80584.84511856441

_____


EVENT time: 80585.87121189001  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 7       rcv_end: 14
Packet received is not corrupt. At time 80585.87121189001
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____


EVENT time: 80591.31394390698  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 80591.31394390698
Recieved ACK for last sent packet. Stopping Timer at 80591.31394390698
```

Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 80676.1558885464 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80676.1558885464
generateNextArrival(): future time for event 1 at entity 0 will be
80735.86230048524
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2088 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80676.1558885464
Packet: 7 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 80676.16
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 80683.11615344706 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 80683.11615344706
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 80690.05966368601 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 80690.05966368601
Recieved ACK for last sent packet. Stopping Timer at 80690.05966368601
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 80735.86230048524 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 80735.86230048524
generateNextArrival(): future time for event 1 at entity 0 will be
81121.49418622394
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2109 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 80735.86230048524
Packet: 8 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 80735.86
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 80742.19879757073 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 80742.19879757073
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 80747.97909482101 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 80747.97909482101
Recieved ACK for last sent packet. Stopping Timer at 80747.97909482101
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81121.49418622394 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81121.49418622394
generateNextArrival(): future time for event 1 at entity 0 will be

81281.39896847437
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2130 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81121.49418622394
Packet: 9 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 81121.49
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 81131.41975157932 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 81131.41975157932
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____

EVENT time: 81151.49418622394 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 81151.49
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2130 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 81151.49418622394
Starting timer for packet 9 at time 81151.49418622394

_____

EVENT time: 81160.71083712271 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 81160.71083712271
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 81169.71214941861 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 81169.71214941861
Recieved ACK for last sent packet. Stopping Timer at 81169.71214941861
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81281.39896847437 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81281.39896847437
generateNextArrival(): future time for event 1 at entity 0 will be
81477.14468825342
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81281.39896847437
Packet: 10 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 81281.40
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 81287.82390820031 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 81287.82390820031
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 81291.97515793328 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1

Expected ACK 10 received
stopTimer: stopping timer at 81291.97515793328
Recieved ACK for last sent packet. Stopping Timer at 81291.97515793328
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 81477.14468825342 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81477.14468825342
generateNextArrival(): future time for event 1 at entity 0 will be
81516.18396557512
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81477.14468825342
Packet: 11 With Payload: lllllllllllllllllll sent to B
Timer started at: 81477.14
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 81483.33506271553 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 81483.33506271553
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
In order ACK 11 Sent
_____

EVENT time: 81507.14468825342 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 81507.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 11

startTimer: starting timer at 81507.14468825342
Starting timer for packet 11 at time 81507.14468825342
_____

EVENT time: 81513.24277474287 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 81513.24277474287
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 81516.18396557512 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81516.18396557512
generateNextArrival(): future time for event 1 at entity 0 will be
81543.6750389111
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 81516.18396557512
startTimer: starting timer at 81516.18396557512
Packet: 12 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 81516.18
Packet added to retransmission buffer at index [1]
Next sequence number: 13

_____

EVENT time: 81517.75960570085 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81518.34855189674 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 81518.34855189674

Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 81526.77114169745 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 81526.77114169745
Recieved ACK for last sent packet. Stopping Timer at 81526.77114169745
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81543.6750389111 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81543.6750389111
generateNextArrival(): future time for event 1 at entity 0 will be
81631.88573870051
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2214 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81543.6750389111
Packet: 13 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 81543.68
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 81550.0598773156 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 81550.0598773156
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side

In order ACK 13 Sent
_____

EVENT time: 81551.08487197486 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 81551.08487197486
Recieved ACK for last sent packet. Stopping Timer at 81551.08487197486
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81631.88573870051 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81631.88573870051
generateNextArrival(): future time for event 1 at entity 0 will be
81714.59089938046
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2235 payload:
ooooooooooooooooooooo
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81631.88573870051
Packet: 14 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 81631.89
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 81636.49128696554 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 81661.88573870051 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 81661.89
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2235 payload:
ooooooooooooooooooooo

```
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 81661.88573870051
Starting timer for packet 14 at time 81661.88573870051

_____


EVENT time: 81666.00732444227  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 81666.00732444227
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message oooooooooooooooooooooo delivered to Layer 5
New rcv_base = 15       rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 81671.64946440015  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 81671.64946440015
Recieved ACK for last sent packet. Stopping Timer at 81671.64946440015
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 81714.59089938046  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81714.59089938046
generateNextArrival(): future time for event 1 at entity 0 will be
81950.32807397685
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2256  payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81714.59089938046
Packet: 15 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 81714.59
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____
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EVENT time: 81721.3388470107 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 81721.3388470107
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 81728.3263039033 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 81728.3263039033
Recieved ACK for last sent packet. Stopping Timer at 81728.3263039033
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 81950.32807397685 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 81950.32807397685
generateNextArrival(): future time for event 1 at entity 0 will be
82122.33039338357
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2261 payload:
qqqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 81950.32807397685
Packet: 0 With Payload: qqqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 81950.33
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 81951.85625782036 type: 2 entity: 1
bInput() _____

Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
———————————————————————

EVENT time: 81980.32807397685 type: 0 entity: 0
aTimerInterrup()———————————————————————
TIMEOUT!!! at: 81980.33
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2261 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 81980.32807397685
Starting timer for packet 0 at time 81980.32807397685

———————————————————————

EVENT time: 81983.45619067963 type: 2 entity: 1
bInput() ———————————————————————
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 81983.45619067963
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

———————————————————————

EVENT time: 81986.33271279029 type: 2 entity: 0
aInput()———————————————————————
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 81986.33271279029
Recieved ACK for last sent packet. Stopping Timer at 81986.33271279029
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

———————————————————————

EVENT time: 82122.33039338357 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 82122.33039338357
generateNextArrival(): future time for event 1 at entity 0 will be
82502.49336222417
aOutput()———————————————————————
Send_Base: 1 Send_end: 8

NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2282 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 82122.33039338357
Packet: 1 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 82122.33
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 82125.89138462476 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 82125.89138462476
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 82133.0425428022 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 82133.0425428022
Recieved ACK for last sent packet. Stopping Timer at 82133.0425428022
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 82502.49336222417 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 82502.49336222417
generateNextArrival(): future time for event 1 at entity 0 will be
82871.8039490951
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2303 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side

startTimer: starting timer at 82502.49336222417
Packet: 2 With Payload: ssssssssssssssssssss sent to B
Timer started at: 82502.49
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 82503.98941007719 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 82503.98941007719
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 82510.57502975552 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 82510.57502975552
Recieved ACK for last sent packet. Stopping Timer at 82510.57502975552
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 82871.8039490951 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 82871.8039490951
generateNextArrival(): future time for event 1 at entity 0 will be
82961.1865596484
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2324 payload:
tttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 82871.8039490951
Packet: 3 With Payload: tttttttttttttttttttt sent to B
Timer started at: 82871.80
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 82901.8039490951 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 82901.80
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2324 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 82901.8039490951
Starting timer for packet 3 at time 82901.8039490951

_____

EVENT time: 82911.17194128237 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 82911.17194128237
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 82918.2522354808 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 82918.2522354808
Recieved ACK for last sent packet. Stopping Timer at 82918.2522354808
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 82961.1865596484 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 82961.1865596484
generateNextArrival(): future time for event 1 at entity 0 will be
83299.5147556993
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window

toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 82961.1865596484
Packet: 4 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 82961.19
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 82970.19693594163 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 82970.19693594163
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 82991.1865596484 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 82991.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 82991.1865596484
Starting timer for packet 4 at time 82991.1865596484

_____

EVENT time: 83000.81026642656 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 83000.81026642656
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 83009.8931546983 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11

Expected ACK 4 received
stopTimer: stopping timer at 83009.8931546983
Recieved ACK for last sent packet. Stopping Timer at 83009.8931546983
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 83299.5147556993 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 83299.5147556993
generateNextArrival(): future time for event 1 at entity 0 will be
83569.04202398752
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2366 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 83299.5147556993
Packet: 5 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 83299.51
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 83304.6116824854 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 83304.6116824854
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 83309.02359080779 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 83309.02359080779
Recieved ACK for last sent packet. Stopping Timer at 83309.02359080779
Sliding window 1 times
New send_base: 6 send_end: 13

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 83569.04202398752 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 83569.04202398752
generateNextArrival(): future time for event 1 at entity 0 will be
83822.40668965725
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2387 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 83569.04202398752
Packet: 6 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 83569.04
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 83572.41184728536 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 83572.41184728536
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message wwwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: packet being lost
In order ACK 6 Sent

_____

EVENT time: 83599.04202398752 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 83599.04
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2387 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 83599.04202398752
Starting timer for packet 6 at time 83599.04202398752

_____

EVENT time: 83605.77953428752 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 83605.77953428752
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 83610.57322916346 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 83610.57322916346
Recieved ACK for last sent packet. Stopping Timer at 83610.57322916346
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 83822.40668965725 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 83822.40668965725
generateNextArrival(): future time for event 1 at entity 0 will be
84034.534745323
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2408 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 83822.40668965725
Packet: 7 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 83822.41
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 83831.68074587235 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 83831.68074587235
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:

toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 83834.00573747976 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 83834.00573747976
Recieved ACK for last sent packet. Stopping Timer at 83834.00573747976
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 84034.534745323 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 84034.534745323
generateNextArrival(): future time for event 1 at entity 0 will be
84367.96777245397
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2429 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 84034.534745323
Packet: 8 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 84034.53
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 84038.45197912531 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 84038.45197912531
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

```
EVENT time: 84045.88137455363  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 84045.88137455363
Recieved ACK for last sent packet. Stopping Timer at 84045.88137455363
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 84367.96777245397  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 84367.96777245397
generateNextArrival(): future time for event 1 at entity 0 will be
84671.12643818473
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2450  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 84367.96777245397
Packet: 9 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 84367.97
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____


EVENT time: 84371.15713980526  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9      rcv_end: 0
Packet received is not corrupt. At time 84371.15713980526
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 10     rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____


EVENT time: 84380.66631061737  type: 2  entity: 0
aInput()_____
Current Send_Base: 9    Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 84380.66631061737
```

Recieved ACK for last sent packet. Stopping Timer at 84380.66631061737
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 84671.12643818473 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 84671.12643818473
generateNextArrival(): future time for event 1 at entity 0 will be
84768.91994994962
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 84671.12643818473
Packet: 10 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 84671.13
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 84679.6544999542 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 84701.12643818473 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 84701.13
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 84701.12643818473
Starting timer for packet 10 at time 84701.12643818473

_____

EVENT time: 84703.86178167055 type: 2 entity: 1
bInput() _____

Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 84703.86178167055
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 84710.49986266668 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 84710.49986266668
Recieved ACK for last sent packet. Stopping Timer at 84710.49986266668
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 84768.91994994962 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 84768.91994994962
generateNextArrival(): future time for event 1 at entity 0 will be
84838.41669972836
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 84768.91994994962
Packet: 11 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 84768.92
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 84775.65004425182 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 84775.65004425182
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 12   rcv_end = 3

toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 84785.37372966702 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 84785.37372966702
Recieved ACK for last sent packet. Stopping Timer at 84785.37372966702
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 84838.41669972836 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 84838.41669972836
generateNextArrival(): future time for event 1 at entity 0 will be
85123.83800775168
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 84838.41669972836
Packet: 12 With Payload: cccccccccccccccccccc sent to B
Timer started at: 84838.42
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 84844.80730613114 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 84844.80730613114
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

```
EVENT time: 84848.68279061248  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 84848.68279061248
Recieved ACK for last sent packet. Stopping Timer at 84848.68279061248
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 85123.83800775168  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 85123.83800775168
generateNextArrival(): future time for event 1 at entity 0 will be
85424.94582964566
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2014  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 85123.83800775168
Packet: 13 With Payload: dddddddddddddddddddd sent to B
Timer started at: 85123.84
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 85127.03286843468  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13        rcv_end: 4
Packet received is not corrupt. At time 85127.03286843468
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 14       rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____


EVENT time: 85130.12253181552  type: 2  entity: 0
aInput()_____
Current Send_Base: 13    Send_end: 4
Expected ACK 13 received
```

stopTimer: stopping timer at 85130.12253181552
Recieved ACK for last sent packet. Stopping Timer at 85130.12253181552
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 85424.94582964566 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 85424.94582964566
generateNextArrival(): future time for event 1 at entity 0 will be
85532.29773857843
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 85424.94582964566
Packet: 14 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 85424.95
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 85429.33054597612 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 85429.33054597612
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 85433.0148625141 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 85433.0148625141
Recieved ACK for last sent packet. Stopping Timer at 85433.0148625141
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 85532.29773857843 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 85532.29773857843
generateNextArrival(): future time for event 1 at entity 0 will be
85799.01730399486
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2056 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 85532.29773857843
Packet: 15 With Payload: ffffffffffffffffffff sent to B
Timer started at: 85532.30
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 85541.73027741324 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 85541.73027741324
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 85543.40870387889 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 85543.40870387889
Recieved ACK for last sent packet. Stopping Timer at 85543.40870387889
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 85799.01730399486 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 85799.01730399486
generateNextArrival(): future time for event 1 at entity 0 will be
86071.98706015197
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 85799.01730399486
Packet: 0 With Payload: gggggggggggggggggggg sent to B
Timer started at: 85799.02
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 85801.00830103456 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 85801.00830103456
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 85810.34745323037 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 85810.34745323037
Recieved ACK for last sent packet. Stopping Timer at 85810.34745323037
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 86071.98706015197 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86071.98706015197
generateNextArrival(): future time for event 1 at entity 0 will be
86162.92001098665
aOutput()_____
Send_Base: 1 Send_end: 8

NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: packet being lost
startTimer: starting timer at 86071.98706015197
Packet: 1 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 86071.99
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 86101.98706015197 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86101.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 86101.98706015197
Starting timer for packet 1 at time 86101.98706015197
_____

EVENT time: 86107.9791253395 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 86107.9791253395
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 86116.96340830711 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 86116.96340830711
Recieved ACK for last sent packet. Stopping Timer at 86116.96340830711
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 86162.92001098665 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86162.92001098665
generateNextArrival(): future time for event 1 at entity 0 will be
86358.0309457686
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2103 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 86162.92001098665
Packet: 2 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 86162.92
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 86164.48417615282 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 86164.48417615282
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 86171.10303048798 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 86171.10303048798
Recieved ACK for last sent packet. Stopping Timer at 86171.10303048798
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 86358.0309457686 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86358.0309457686
generateNextArrival(): future time for event 1 at entity 0 will be

86485.9279152806
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 86358.0309457686
Packet: 3 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 86358.03
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 86365.92699972531 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 86365.92699972531
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 86372.38489944149 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 56.0

_____

EVENT time: 86388.0309457686 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86388.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 86388.0309457686
Starting timer for packet 3 at time 86388.0309457686

_____

EVENT time: 86395.9124423963 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 86395.9124423963
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 86398.13251136812 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 57.0

_____

EVENT time: 86418.0309457686 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86418.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
Retransmitting Packet 3
startTimer: starting timer at 86418.0309457686
Starting timer for packet 3 at time 86418.0309457686

_____

EVENT time: 86448.0309457686 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86448.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 86448.0309457686
Starting timer for packet 3 at time 86448.0309457686

_____

EVENT time: 86454.33365886408 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 86454.33365886408

toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent
_____

EVENT time: 86457.98583941159 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 86457.98583941159
Recieved ACK for last sent packet. Stopping Timer at 86457.98583941159
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 86485.9279152806 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86485.9279152806
generateNextArrival(): future time for event 1 at entity 0 will be
86574.26068910792
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 86485.9279152806
Packet: 4 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 86485.93
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 86488.17819757681 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 86488.17819757681
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

```
EVENT time: 86493.5868709372  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 86493.5868709372
Recieved ACK for last sent packet. Stopping Timer at 86493.5868709372
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 86574.26068910792  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86574.26068910792
generateNextArrival(): future time for event 1 at entity 0 will be
86578.03277687915
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2166  payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 86574.26068910792
Packet: 5 With Payload: lllllllllllllllllll sent to B
Timer started at: 86574.26
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____


EVENT time: 86578.03277687915  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86578.03277687915
generateNextArrival(): future time for event 1 at entity 0 will be
86854.44502090514
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2187  payload:
mmmmmmmmmmmmmmmmmmm
toLayer3: packet being lost
stopTimer: stopping timer at 86578.03277687915
startTimer: starting timer at 86578.03277687915
Packet: 6 With Payload: mmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 86578.03
Packet added to retransmission buffer at index [1]
```

Next sequence number: 7
_____

EVENT time: 86579.61964781638 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 86579.61964781638
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 86585.21042512282 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 86608.03277687915 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86608.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 86608.03277687915
Starting timer for packet 6 at time 86608.03277687915

_____

EVENT time: 86610.12979522077 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 86610.12979522077
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message mmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 86613.38343455302 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 86613.38343455302
Recieved ACK for last sent packet. Stopping Timer at 86613.38343455302
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 86854.44502090514 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 86854.44502090514
generateNextArrival(): future time for event 1 at entity 0 will be
87110.25116733296
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 86854.44502090514
Packet: 7 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 86854.45
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 86862.15155491802 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 86862.15155491802
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 86870.6082033753 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 7    Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 58.0

_____


EVENT time: 86884.44502090514  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86884.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2208  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 86884.44502090514
Starting timer for packet 7 at time 86884.44502090514

_____


EVENT time: 86914.44502090514  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86914.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2208  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 86914.44502090514
Starting timer for packet 7 at time 86914.44502090514

_____


EVENT time: 86944.44502090514  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 86944.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2208  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 86944.44502090514
Starting timer for packet 7 at time 86944.44502090514

_____


EVENT time: 86947.70140690324  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 86947.70140690324
```

toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent
_____

EVENT time: 86949.99481185335 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 86949.99481185335
Recieved ACK for last sent packet. Stopping Timer at 86949.99481185335
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 87110.25116733296 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 87110.25116733296
generateNextArrival(): future time for event 1 at entity 0 will be
87381.7926572466
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2229 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 87110.25116733296
Packet: 8 With Payload: oooooooooooooooooooo sent to B
Timer started at: 87110.25
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 87114.86028626359 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 87114.86028626359
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 87119.05136265141 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 87119.05136265141
Recieved ACK for last sent packet. Stopping Timer at 87119.05136265141
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 87381.7926572466 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 87381.7926572466
generateNextArrival(): future time for event 1 at entity 0 will be
87701.35807367165
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2250 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 87381.7926572466
Packet: 9 With Payload: pppppppppppppppppppp sent to B
Timer started at: 87381.79
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 87384.47361674854 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 87384.47361674854
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 87391.44239631334 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received

stopTimer: stopping timer at 87391.44239631334
Recieved ACK for last sent packet. Stopping Timer at 87391.44239631334
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 87701.35807367165 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 87701.35807367165
generateNextArrival(): future time for event 1 at entity 0 will be
87728.94680623796
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 87701.35807367165
Packet: 10 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 87701.36
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 87705.5337687307 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 87705.5337687307
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 87711.634601886 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 87711.634601886
Recieved ACK for last sent packet. Stopping Timer at 87711.634601886
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 87728.94680623796 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 87728.94680623796
generateNextArrival(): future time for event 1 at entity 0 will be
88088.45484786521
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2292 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 87728.94680623796
Packet: 11 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 87728.95
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 87735.73732718892 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 87735.73732718892
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 87743.4103518784 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 87743.4103518784
Recieved ACK for last sent packet. Stopping Timer at 87743.4103518784
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 88088.45484786521 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 88088.45484786521
generateNextArrival(): future time for event 1 at entity 0 will be
88241.52348399302
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2313 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88088.45484786521
Packet: 12 With Payload: sssssssssssssssssss sent to B
Timer started at: 88088.45
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 88098.09338663898 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 88098.09338663898
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 88102.15536973173 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 88102.15536973173
Recieved ACK for last sent packet. Stopping Timer at 88102.15536973173
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 88241.52348399302 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88241.52348399302
generateNextArrival(): future time for event 1 at entity 0 will be
88490.59114352852
aOutput()_____
Send_Base: 13 Send_end: 4

NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88241.52348399302
Packet: 13 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 88241.52
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 88248.7015594958 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 88248.7015594958
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 88250.46430860314 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 88250.46430860314
Recieved ACK for last sent packet. Stopping Timer at 88250.46430860314
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 88490.59114352852 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88490.59114352852
generateNextArrival(): future time for event 1 at entity 0 will be
88637.67815179905
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side

```
startTimer: starting timer at 88490.59114352852
Packet: 14 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 88490.59
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 88498.75637073883  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 88498.75637073883
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 15       rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 88504.17740409556  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 88504.17740409556
Recieved ACK for last sent packet. Stopping Timer at 88504.17740409556
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 88637.67815179905  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88637.67815179905
generateNextArrival(): future time for event 1 at entity 0 will be
88675.2525406659
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2376  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88637.67815179905
Packet: 15 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 88637.68
Packet added to retransmission buffer at index [0]
Next sequence number: 0
```

_____

EVENT time: 88646.56877346108 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 88646.56877346108
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message vvvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 88649.93667409282 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 59.0

_____

EVENT time: 88667.67815179905 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 88667.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2376 payload:
vvvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 88667.67815179905
Starting timer for packet 15 at time 88667.67815179905

_____

EVENT time: 88675.2525406659 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88675.2525406659
generateNextArrival(): future time for event 1 at entity 0 will be
88717.91741691335
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2381 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side

```
stopTimer: stopping timer at 88675.2525406659
startTimer: starting timer at 88675.2525406659
Packet: 0 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 88675.25
Packet added to retransmission buffer at index [1]
Next sequence number: 1

_____


EVENT time: 88675.84585100862  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 88675.84585100862
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____


EVENT time: 88678.85338908045  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 88683.02365184482  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 88683.02365184482
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 88685.37528611101  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 88685.37528611101
Recieved ACK for last sent packet. Stopping Timer at 88685.37528611101
Sliding window 1 times
New send_base: 1 send_end: 8
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 88717.91741691335 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88717.91741691335
generateNextArrival(): future time for event 1 at entity 0 will be
88757.96990874964
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88717.91741691335
Packet: 1 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 88717.92
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 88723.49391155735 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 88723.49391155735
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 88725.04873805963 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 88725.04873805963
Recieved ACK for last sent packet. Stopping Timer at 88725.04873805963
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 88757.96990874964 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 88757.96990874964
generateNextArrival(): future time for event 1 at entity 0 will be
88914.29792168949
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2423  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88757.96990874964
Packet: 2 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 88757.97
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____


EVENT time: 88762.70125431073  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2       rcv_end: 9
Packet received is not corrupt. At time 88762.70125431073
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: packet being lost
In order ACK 2 Sent

_____


EVENT time: 88787.96990874964  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 88787.97
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2423  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 88787.96990874964
Starting timer for packet 2 at time 88787.96990874964

_____


EVENT time: 88796.22714926601  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 3       rcv_end: 10
Packet received is not corrupt. At time 88796.22714926601
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
```

toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 88803.27915280615 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 88803.27915280615
Recieved ACK for last sent packet. Stopping Timer at 88803.27915280615
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 88914.29792168949 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88914.29792168949
generateNextArrival(): future time for event 1 at entity 0 will be
88918.44843897823
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2444 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 88914.29792168949
Packet: 3 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 88914.30
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 88918.44843897823 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 88918.44843897823
generateNextArrival(): future time for event 1 at entity 0 will be
89020.24597918637
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 88918.44843897823

```
startTimer: starting timer at 88918.44843897823
Packet: 4 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 88918.45
Packet added to retransmission buffer at index [1]
Next sequence number: 5
_____


EVENT time: 88918.83562730794  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3       rcv_end: 10
Packet received is not corrupt. At time 88918.83562730794
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 4      rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____


EVENT time: 88922.54466383859  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4       rcv_end: 11
Packet received is not corrupt. At time 88922.54466383859
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 5      rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____


EVENT time: 88948.44843897823  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 88948.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2444  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: packet being lost
Retransmitting Packet 3
toLayer3: seqnum: 4  acknum: 0  checksum: -1945  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 88948.44843897823
Starting timer for packet 4 at time 88948.44843897823

_____
```

EVENT time: 88953.04107791375 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 5   rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 88978.44843897823 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 88978.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2444 payload:
zzzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
toLayer3: seqnum: 4 acknum: 0 checksum: -1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 88978.44843897823
Starting timer for packet 4 at time 88978.44843897823
_____

EVENT time: 88987.0470900601 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 88987.0470900601
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent
_____

EVENT time: 88988.85598315377 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Cumulative ACK 4received
stopTimer: stopping timer at 88988.85598315377
Recieved ACK for last sent packet. Stopping Timer at 88988.85598315377
Sliding window 2 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 88989.53138828698 type: 2 entity: 1
bInput() _____

Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 88989.53138828698
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 89020.24597918637 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 89020.24597918637
generateNextArrival(): future time for event 1 at entity 0 will be
89415.46067690053
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -1966 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 89020.24597918637
Packet: 5 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 89020.25
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 89023.53505050813 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 89023.53505050813
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 89027.08999908445 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 89027.08999908445
Recieved ACK for last sent packet. Stopping Timer at 89027.08999908445
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 89415.46067690053 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 89415.46067690053
generateNextArrival(): future time for event 1 at entity 0 will be
89793.46293527023
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1987 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 89415.46067690053
Packet: 6 With Payload: cccccccccccccccccccc sent to B
Timer started at: 89415.46
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 89419.8580278939 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 89419.8580278939
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 89422.92077394939 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 89422.92077394939
Recieved ACK for last sent packet. Stopping Timer at 89422.92077394939
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 89793.46293527023 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 89793.46293527023
generateNextArrival(): future time for event 1 at entity 0 will be
90039.05148472548
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 89793.46293527023
Packet: 7 With Payload: dddddddddddddddddddd sent to B
Timer started at: 89793.46
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 89800.14716025269 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 89800.14716025269
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 89808.56920072023 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 89808.56920072023
Recieved ACK for last sent packet. Stopping Timer at 89808.56920072023
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 90039.05148472548 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 90039.05148472548
generateNextArrival(): future time for event 1 at entity 0 will be
90276.16809595018
aOutput()_____
Send_Base: 8 Send_end: 15

NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 90039.05148472548
Packet: 8 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 90039.05
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 90044.0042115543 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 90044.0042115543
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 90049.00390636921 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 90049.00390636921
Recieved ACK for last sent packet. Stopping Timer at 90049.00390636921
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 90276.16809595018 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 90276.16809595018
generateNextArrival(): future time for event 1 at entity 0 will be
90665.462202826
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side

startTimer: starting timer at 90276.16809595018
Packet: 9 With Payload: ffffffffffffffffffff sent to B
Timer started at: 90276.17
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 90280.03643910031 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 90280.03643910031
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 90289.54066591387 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 90289.54066591387
Recieved ACK for last sent packet. Stopping Timer at 90289.54066591387
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 90665.462202826 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 90665.462202826
generateNextArrival(): future time for event 1 at entity 0 will be
90994.67146824548
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2071 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 90665.462202826
Packet: 10 With Payload: gggggggggggggggggggg sent to B
Timer started at: 90665.46
Packet added to retransmission buffer at index [0]
Next sequence number: 11

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EVENT time: 90675.3372295297 type: 2 entity: 1
bInput() ——————————————————————————
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 90675.3372295297
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

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EVENT time: 90684.42341380047 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 90684.42341380047
Recieved ACK for last sent packet. Stopping Timer at 90684.42341380047
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

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EVENT time: 90994.67146824548 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 90994.67146824548
generateNextArrival(): future time for event 1 at entity 0 will be
91189.64812158573
aOutput()——————————————————————————
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2092 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 90994.67146824548
Packet: 11 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 90994.67
Packet added to retransmission buffer at index [0]
Next sequence number: 12

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EVENT time: 91001.4119998779 type: 2 entity: 1
bInput() ——————————————————————————

Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 91001.4119998779
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 91009.24103518782 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 91009.24103518782
Recieved ACK for last sent packet. Stopping Timer at 91009.24103518782
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 91189.64812158573 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 91189.64812158573
generateNextArrival(): future time for event 1 at entity 0 will be
91542.21015045625
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2113 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 91189.64812158573
Packet: 12 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 91189.65
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 91199.40723899045 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 91199.40723899045
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 13   rcv_end = 4

toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

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EVENT time: 91208.89992980743 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 91208.89992980743
Recieved ACK for last sent packet. Stopping Timer at 91208.89992980743
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

————————————————————————

EVENT time: 91542.21015045625 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 91542.21015045625
generateNextArrival(): future time for event 1 at entity 0 will be
91615.21042512283
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 91542.21015045625
Packet: 13 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 91542.21
Packet added to retransmission buffer at index [0]
Next sequence number: 14

————————————————————————

EVENT time: 91551.8283639027 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 91551.8283639027
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

————————————————————————

EVENT time: 91554.14374217963 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 91554.14374217963
Recieved ACK for last sent packet. Stopping Timer at 91554.14374217963
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 91615.21042512283 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 91615.21042512283
generateNextArrival(): future time for event 1 at entity 0 will be
91982.12836085085
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2155 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 91615.21042512283
Packet: 14 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 91615.21
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 91624.1395001068 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 91624.1395001068
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: −15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 91629.04443494978 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received

stopTimer: stopping timer at 91629.04443494978
Recieved ACK for last sent packet. Stopping Timer at 91629.04443494978
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 91982.12836085085 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 91982.12836085085
generateNextArrival(): future time for event 1 at entity 0 will be
92194.29303872799
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 91982.12836085085
Packet: 15 With Payload: lllllllllllllllllll sent to B
Timer started at: 91982.13
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 91985.86870937223 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 91985.86870937223
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 91993.52690206609 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 91993.52690206609
Recieved ACK for last sent packet. Stopping Timer at 91993.52690206609
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 92194.29303872799 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 92194.29303872799
generateNextArrival(): future time for event 1 at entity 0 will be
92291.86681722465
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2181 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 92194.29303872799
Packet: 0 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 92194.29
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 92198.71813104648 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 92198.71813104648
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 92200.31717886898 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 92200.31717886898
Recieved ACK for last sent packet. Stopping Timer at 92200.31717886898
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 92291.86681722465 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 92291.86681722465
generateNextArrival(): future time for event 1 at entity 0 will be
92442.88460951568
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2202 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 92291.86681722465
Packet: 1 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 92291.87
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 92294.38270210884 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 92294.38270210884
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 92304.2805261391 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 92304.2805261391
Recieved ACK for last sent packet. Stopping Timer at 92304.2805261391
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 92442.88460951568 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 92442.88460951568
generateNextArrival(): future time for event 1 at entity 0 will be
92466.09088412122
aOutput()_____
Send_Base: 2 Send_end: 9

NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2   acknum: 0   checksum: -2223   payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 92442.88460951568
Packet: 2 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 92442.88
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 92446.60216071048 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 92446.60216071048
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 92454.10159611805 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 92454.10159611805
Recieved ACK for last sent packet. Stopping Timer at 92454.10159611805
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 92466.09088412122 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 92466.09088412122
generateNextArrival(): future time for event 1 at entity 0 will be
92722.92245246742
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side

startTimer: starting timer at 92466.09088412122
Packet: 3 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 92466.09
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 92467.94180120243 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 92467.94180120243
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 92469.08655049287 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 92469.08655049287
Recieved ACK for last sent packet. Stopping Timer at 92469.08655049287
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 92722.92245246742 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 92722.92245246742
generateNextArrival(): future time for event 1 at entity 0 will be
92971.80700094608
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2265 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 92722.92245246742
Packet: 4 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 92722.92
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 92726.16125980407 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 92726.16125980407
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: –5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 92729.59727774895 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 92729.59727774895
Recieved ACK for last sent packet. Stopping Timer at 92729.59727774895
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 92971.80700094608 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 92971.80700094608
generateNextArrival(): future time for event 1 at entity 0 will be
93093.63689077426
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: –2286 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 92971.80700094608
Packet: 5 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 92971.81
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 92974.2138431959 type: 2 entity: 1

```
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 93001.80700094608  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 93001.81
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2286  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 93001.80700094608
Starting timer for packet 5 at time 93001.80700094608

_____


EVENT time: 93031.80700094608  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 93031.81
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2286  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 93031.80700094608
Starting timer for packet 5 at time 93031.80700094608

_____


EVENT time: 93061.80700094608  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 93061.81
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2286  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 93061.80700094608
Starting timer for packet 5 at time 93061.80700094608

_____


EVENT time: 93067.23572496719  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is not corrupt. At time 93067.23572496719
Packet received is in order. Delivering packet(s) to layer5
```

Packet 5 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 93074.56184575945 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 93074.56184575945
Recieved ACK for last sent packet. Stopping Timer at 93074.56184575945
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 93093.63689077426 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 93093.63689077426
generateNextArrival(): future time for event 1 at entity 0 will be
93361.66264839626
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2307 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 93093.63689077426
Packet: 6 With Payload: ssssssssssssssssssss sent to B
Timer started at: 93093.64
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 93101.96224860378 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 93101.96224860378
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being lost
In order ACK 6 Sent

_____

EVENT time: 93123.63689077426 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 93123.64
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2307 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 93123.63689077426
Starting timer for packet 6 at time 93123.63689077426

_____

EVENT time: 93132.76509903256 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 93132.76509903256
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 93135.90035706657 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 93135.90035706657
Recieved ACK for last sent packet. Stopping Timer at 93135.90035706657
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 93361.66264839626 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 93361.66264839626
generateNextArrival(): future time for event 1 at entity 0 will be
93603.51573229165
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
ttttttttttttttttttt
toLayer3: scheduling arrival on other side

startTimer: starting timer at 93361.66264839626
Packet: 7 With Payload: tttttttttttttttttttt sent to B
Timer started at: 93361.66
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 93371.33469649343 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 93371.33469649343
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 93379.81936094242 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 93379.81936094242
Recieved ACK for last sent packet. Stopping Timer at 93379.81936094242
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 93603.51573229165 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 93603.51573229165
generateNextArrival(): future time for event 1 at entity 0 will be
93666.8965727714
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 93603.51573229165
Packet: 8 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 93603.52
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 93612.40388195442 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 93612.40388195442
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 93620.41199987795 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 93620.41199987795
Recieved ACK for last sent packet. Stopping Timer at 93620.41199987795
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 93666.8965727714 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 93666.8965727714
generateNextArrival(): future time for event 1 at entity 0 will be
93733.61003448593
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2370 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 93666.8965727714
Packet: 9 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 93666.90
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 93674.76955473496 type: 2 entity: 1
bInput() _____

Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 93674.76955473496
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 93677.57878353223 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 93677.57878353223
Recieved ACK for last sent packet. Stopping Timer at 93677.57878353223
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 93733.61003448593 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 93733.61003448593
generateNextArrival(): future time for event 1 at entity 0 will be
94070.16815698723
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2391 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 93733.61003448593
Packet: 10 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 93733.61
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 93737.19959105199 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 93737.19959105199
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message wwwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 11   rcv_end = 2

toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 93743.37650685142 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 93743.37650685142
Recieved ACK for last sent packet. Stopping Timer at 93743.37650685142
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 94070.16815698723 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 94070.16815698723
generateNextArrival(): future time for event 1 at entity 0 will be
94424.96414075138
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2412 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being lost
startTimer: starting timer at 94070.16815698723
Packet: 11 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 94070.17
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 94100.16815698723 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 94100.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: −2412 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 94100.16815698723
Starting timer for packet 11 at time 94100.16815698723

_____

EVENT time: 94109.34113589894 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 94109.34113589894
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 94115.36396374402 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 94115.36396374402
Recieved ACK for last sent packet. Stopping Timer at 94115.36396374402
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 94424.96414075138 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 94424.96414075138
generateNextArrival(): future time for event 1 at entity 0 will be
94764.5496993927
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 94424.96414075138
Packet: 12 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 94424.96
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 94434.53675954469 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 94434.53675954469

Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 94436.72139652702 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 94436.72139652702
Recieved ACK for last sent packet. Stopping Timer at 94436.72139652702
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 94764.5496993927 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 94764.5496993927
generateNextArrival(): future time for event 1 at entity 0 will be
95040.08301034578
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2454 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 94764.5496993927
Packet: 13 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 94764.55
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 94772.54133732109 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 94772.54133732109
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side

In order ACK 13 Sent

_____

EVENT time: 94782.2631000702 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 94782.2631000702
Recieved ACK for last sent packet. Stopping Timer at 94782.2631000702
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 95040.08301034578 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 95040.08301034578
generateNextArrival(): future time for event 1 at entity 0 will be
95399.21262245552
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1955 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 95040.08301034578
Packet: 14 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 95040.08
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 95041.7474288156 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 95041.7474288156
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 95049.23038422805 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 95049.23038422805
Recieved ACK for last sent packet. Stopping Timer at 95049.23038422805
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 95399.21262245552  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 95399.21262245552
generateNextArrival(): future time for event 1 at entity 0 will be
95634.03424176764
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -1976  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 95399.21262245552
Packet: 15 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 95399.21
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____


EVENT time: 95400.54826502273  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15        rcv_end: 6
Packet received is not corrupt. At time 95400.54826502273
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 0      rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 95404.98434400464  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 95404.98434400464
Recieved ACK for last sent packet. Stopping Timer at 95404.98434400464
```

Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 95634.03424176764 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 95634.03424176764
generateNextArrival(): future time for event 1 at entity 0 will be
95759.23337504198
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 95634.03424176764
Packet: 0 With Payload: cccccccccccccccccccc sent to B
Timer started at: 95634.03
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 95643.75902584918 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 95643.75902584918
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 95653.11822870572 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 60.0
_____

EVENT time: 95664.03424176764 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 95664.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
cccccccccccccccccccc
toLayer3: packet being lost
Retransmitting Packet 0
startTimer: starting timer at 95664.03424176764
Starting timer for packet 0 at time 95664.03424176764

_____

EVENT time: 95694.03424176764 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 95694.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 95694.03424176764
Starting timer for packet 0 at time 95694.03424176764

_____

EVENT time: 95698.71834467606 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 95724.03424176764 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 95724.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
cccccccccccccccccccc
toLayer3: packet being lost
Retransmitting Packet 0
startTimer: starting timer at 95724.03424176764
Starting timer for packet 0 at time 95724.03424176764

_____

EVENT time: 95754.03424176764 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 95754.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:

cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 95754.03424176764
Starting timer for packet 0 at time 95754.03424176764
_____

EVENT time: 95759.23337504198 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 95759.23337504198
generateNextArrival(): future time for event 1 at entity 0 will be
96055.82445753351
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2002 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 95759.23337504198
startTimer: starting timer at 95759.23337504198
Packet: 1 With Payload: dddddddddddddddddddd sent to B
Timer started at: 95759.23
Packet added to retransmission buffer at index [1]
Next sequence number: 2
_____

EVENT time: 95762.45518356885 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 95762.45518356885
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent
_____

EVENT time: 95766.47349467453 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 95766.47349467453
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

```
EVENT time: 95770.22763756219  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 95778.66945402387  type: 2  entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 95778.66945402387
Recieved ACK for last sent packet. Stopping Timer at 95778.66945402387
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 96055.82445753351  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96055.82445753351
generateNextArrival(): future time for event 1 at entity 0 will be
96086.68477431564
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2023  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 96055.82445753351
Packet: 2 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 96055.82
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____


EVENT time: 96064.22397534107  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 96064.22397534107
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
```

```
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 96066.49650563068  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 96066.49650563068
Recieved ACK for last sent packet. Stopping Timer at 96066.49650563068
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 96086.68477431564  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96086.68477431564
generateNextArrival(): future time for event 1 at entity 0 will be
96179.21689504686
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 96086.68477431564
Packet: 3 With Payload: ffffffffffffffffffff sent to B
Timer started at: 96086.68
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 96091.74434644614  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3      rcv_end: 10
Packet received is not corrupt. At time 96091.74434644614
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 4     rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____
```

EVENT time: 96116.68477431564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 96116.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2044 payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 3
startTimer: starting timer at 96116.68477431564
Starting timer for packet 3 at time 96116.68477431564

_____

EVENT time: 96146.68477431564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 96146.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2044 payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 3
startTimer: starting timer at 96146.68477431564
Starting timer for packet 3 at time 96146.68477431564

_____

EVENT time: 96176.68477431564 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 96176.68
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2044 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 96176.68477431564
Starting timer for packet 3 at time 96176.68477431564

_____

EVENT time: 96179.21689504686 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96179.21689504686
generateNextArrival(): future time for event 1 at entity 0 will be
96187.54234443192
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window

toLayer3: seqnum: 4 acknum: 0 checksum: −2065 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 96179.21689504686
startTimer: starting timer at 96179.21689504686
Packet: 4 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 96179.22
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____

EVENT time: 96185.23838007753 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 96185.23838007753
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 96187.54234443192 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96187.54234443192
generateNextArrival(): future time for event 1 at entity 0 will be
96585.93096713159
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2086 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 96187.54234443192
startTimer: starting timer at 96187.54234443192
Packet: 5 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 96187.54
Packet added to retransmission buffer at index [2]
Next sequence number: 6

_____

EVENT time: 96192.98913541064 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 96195.21393475143 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 96195.21393475143
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 96201.59190649129 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 96204.19876705222 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 96204.19876705222
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 96208.13467818232 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 96208.13467818232
Recieved ACK for last sent packet. Stopping Timer at 96208.13467818232
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 96585.93096713159 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96585.93096713159
generateNextArrival(): future time for event 1 at entity 0 will be
96744.67604602194
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 96585.93096713159
Packet: 6 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 96585.93
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 96590.12506485185 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 96615.93096713159 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 96615.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 96615.93096713159
Starting timer for packet 6 at time 96615.93096713159

_____

EVENT time: 96622.02822962128 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 96622.02822962128
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:

toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 96625.43540757471 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 96625.43540757471
Recieved ACK for last sent packet. Stopping Timer at 96625.43540757471
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 96744.67604602194 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 96744.67604602194
generateNextArrival(): future time for event 1 at entity 0 will be
97005.04776146736
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2128 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 96744.67604602194
Packet: 7 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 96744.68
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 96745.8353526414 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 96745.8353526414
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

```
EVENT time: 96749.80614642783  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 96749.80614642783
Recieved ACK for last sent packet. Stopping Timer at 96749.80614642783
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 97005.04776146736  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 97005.04776146736
generateNextArrival(): future time for event 1 at entity 0 will be
97334.73311563466
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2149  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 97005.04776146736
Packet: 8 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 97005.05
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 97006.91817987613  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8       rcv_end: 15
Packet received is not corrupt. At time 97006.91817987613
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 97009.84908597068  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Received Corrupted ACK
```

Number of Corruped Packets to A: 61.0
_____

EVENT time: 97035.04776146736 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 97035.05
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2149 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 97035.04776146736
Starting timer for packet 8 at time 97035.04776146736

_____

EVENT time: 97040.399304178 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 97040.399304178
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 97046.67867061375 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 97046.67867061375
Recieved ACK for last sent packet. Stopping Timer at 97046.67867061375
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 97334.73311563466 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 97334.73311563466
generateNextArrival(): future time for event 1 at entity 0 will be
97565.18448438981
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2170 payload:
llllllllllllllllllll

toLayer3: scheduling arrival on other side
startTimer: starting timer at 97334.73311563466
Packet: 9 With Payload: llllllllllllllllllll sent to B
Timer started at: 97334.73
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 97338.32294686731 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 97338.32294686731
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 97346.56205938905 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 97346.56205938905
Recieved ACK for last sent packet. Stopping Timer at 97346.56205938905
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 97565.18448438981 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 97565.18448438981
generateNextArrival(): future time for event 1 at entity 0 will be
97688.58912930696
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 97565.18448438981
Packet: 10 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 97565.18
Packet added to retransmission buffer at index [0]

Next sequence number: 11
_____

EVENT time: 97569.5090487381 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 97569.5090487381
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 97575.2552873318 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 97575.2552873318
Recieved ACK for last sent packet. Stopping Timer at 97575.2552873318
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 97688.58912930696 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 97688.58912930696
generateNextArrival(): future time for event 1 at entity 0 will be
97949.41251869262
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2212 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 97688.58912930696
Packet: 11 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 97688.59
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 97695.04373302411 type: 2 entity: 1

bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 97695.04373302411
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 97697.49699392685 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 97697.49699392685
Recieved ACK for last sent packet. Stopping Timer at 97697.49699392685
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 97949.41251869262 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 97949.41251869262
generateNextArrival(): future time for event 1 at entity 0 will be
98002.83211767941
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2233 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 97949.41251869262
Packet: 12 With Payload: oooooooooooooooooooo sent to B
Timer started at: 97949.41
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 97951.4546037172 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 97951.4546037172
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message oooooooooooooooooooo delivered to Layer 5

New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 97958.72139652703 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 97958.72139652703
Recieved ACK for last sent packet. Stopping Timer at 97958.72139652703
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 98002.83211767941 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98002.83211767941
generateNextArrival(): future time for event 1 at entity 0 will be
98073.81817072058
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 98002.83211767941
Packet: 13 With Payload: pppppppppppppppppppp sent to B
Timer started at: 98002.83
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 98005.69930112617 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 98005.69930112617
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 98013.28388317517 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 98013.28388317517
Recieved ACK for last sent packet. Stopping Timer at 98013.28388317517
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 98073.81817072058 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98073.81817072058
generateNextArrival(): future time for event 1 at entity 0 will be
98167.21701712093
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2275 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 98073.81817072058
Packet: 14 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 98073.82
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 98074.9631946776 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 98074.9631946776
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: −15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 98082.39039277325 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5

Expected ACK 14 received
stopTimer: stopping timer at 98082.39039277325
Recieved ACK for last sent packet. Stopping Timer at 98082.39039277325
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 98167.21701712093 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98167.21701712093
generateNextArrival(): future time for event 1 at entity 0 will be
98447.53563035985
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2296 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 98167.21701712093
Packet: 15 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 98167.22
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 98170.59425641656 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 98170.59425641656
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 98180.50224311049 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 98180.50224311049
Recieved ACK for last sent packet. Stopping Timer at 98180.50224311049
Sliding window 1 times
New send_base: 0 send_end: 7

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 98447.53563035985 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98447.53563035985
generateNextArrival(): future time for event 1 at entity 0 will be
98681.71025727107
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 98447.53563035985
Packet: 0 With Payload: ssssssssssssssssssss sent to B
Timer started at: 98447.54
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 98450.71428571432 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 98477.53563035985 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 98477.54
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 98477.53563035985
Starting timer for packet 0 at time 98477.53563035985
_____

EVENT time: 98483.89135410631 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 98483.89135410631
Packet received is in order. Delivering packet(s) to layer5

```
Packet 0 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

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EVENT time: 98492.13843195903  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 98492.13843195903
Recieved ACK for last sent packet. Stopping Timer at 98492.13843195903
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 98681.71025727107  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98681.71025727107
generateNextArrival(): future time for event 1 at entity 0 will be
98930.42390209666
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2322  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 98681.71025727107
Packet: 1 With Payload: tttttttttttttttttttt sent to B
Timer started at: 98681.71
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____


EVENT time: 98683.96081423387  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1     rcv_end: 8
Packet received is not corrupt. At time 98683.96081423387
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: packet being lost
In order ACK 1 Sent
```

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EVENT time: 98711.71025727107 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 98711.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2322 payload:
ttttttttttttttttttttt
toLayer3: packet being lost
Retransmitting Packet 1
startTimer: starting timer at 98711.71025727107
Starting timer for packet 1 at time 98711.71025727107

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EVENT time: 98741.71025727107 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 98741.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2322 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 98741.71025727107
Starting timer for packet 1 at time 98741.71025727107

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EVENT time: 98749.95019379257 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 98749.95019379257
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

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EVENT time: 98751.29544969027 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 62.0

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EVENT time: 98771.71025727107 type: 0 entity: 0
aTimerInterrup()_____

```
TIMEOUT!!! at: 98771.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1  acknum: 0  checksum: -2322  payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 98771.71025727107
Starting timer for packet 1 at time 98771.71025727107

_____


EVENT time: 98779.81945249798  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 98779.81945249798
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

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EVENT time: 98782.10434278393  type: 2  entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 98782.10434278393
Recieved ACK for last sent packet. Stopping Timer at 98782.10434278393
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 98930.42390209666  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 98930.42390209666
generateNextArrival(): future time for event 1 at entity 0 will be
99159.65453047278
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2343  payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: packet being lost
startTimer: starting timer at 98930.42390209666
Packet: 2 With Payload: uuuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 98930.42
Packet added to retransmission buffer at index [0]
Next sequence number: 3
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EVENT time: 98960.42390209666 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 98960.42
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 98960.42390209666
Starting timer for packet 2 at time 98960.42390209666

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EVENT time: 98969.68807031469 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 98969.68807031469
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

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EVENT time: 98977.77968688014 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 98977.77968688014
Recieved ACK for last sent packet. Stopping Timer at 98977.77968688014
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

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EVENT time: 99159.65453047278 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99159.65453047278
generateNextArrival(): future time for event 1 at entity 0 will be
99295.5351420637
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window

toLayer3: seqnum: 3 acknum: 0 checksum: −2364 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 99159.65453047278
Packet: 3 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 99159.65
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 99166.34150212108 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 99166.34150212108
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

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EVENT time: 99175.76305429247 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 99175.76305429247
Recieved ACK for last sent packet. Stopping Timer at 99175.76305429247
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 99295.5351420637 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99295.5351420637
generateNextArrival(): future time for event 1 at entity 0 will be
99512.99783318587
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2385 payload:
wwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 99295.5351420637
Packet: 4 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B

Timer started at: 99295.54
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 99303.20294808806 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 99303.20294808806
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 99310.09179967655 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 99310.09179967655
Recieved ACK for last sent packet. Stopping Timer at 99310.09179967655
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 99512.99783318587 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99512.99783318587
generateNextArrival(): future time for event 1 at entity 0 will be
99639.29563280134
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2406 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being lost
startTimer: starting timer at 99512.99783318587
Packet: 5 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 99513.00
Packet added to retransmission buffer at index [0]
Next sequence number: 6

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EVENT time: 99542.99783318587  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 99543.00
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2406  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 99542.99783318587
Starting timer for packet 5 at time 99542.99783318587

_____


EVENT time: 99552.03842280348  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is not corrupt. At time 99552.03842280348
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 99554.43345439014  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 99554.43345439014
Recieved ACK for last sent packet. Stopping Timer at 99554.43345439014
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 99639.29563280134  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99639.29563280134
generateNextArrival(): future time for event 1 at entity 0 will be
99754.0330210273
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2427  payload:
yyyyyyyyyyyyyyyyyyyy
```

toLayer3: scheduling arrival on other side
startTimer: starting timer at 99639.29563280134
Packet: 6 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 99639.30
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 99648.86440626244 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 99648.86440626244
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 99652.49406414994 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 99652.49406414994
Recieved ACK for last sent packet. Stopping Timer at 99652.49406414994
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 99754.0330210273 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99754.0330210273
generateNextArrival(): future time for event 1 at entity 0 will be
99976.47633289594
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2448 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 99754.0330210273
Packet: 7 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 99754.03
Packet added to retransmission buffer at index [0]

Next sequence number: 8
_____

EVENT time: 99758.34659871216 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 99758.34659871216
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 99784.0330210273 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 99784.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2448 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 99784.0330210273
Starting timer for packet 7 at time 99784.0330210273

_____

EVENT time: 99787.17239906007 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 99787.17239906007
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 99789.47184667505 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 99789.47184667505
Recieved ACK for last sent packet. Stopping Timer at 99789.47184667505
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 99976.47633289594 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 99976.47633289594
generateNextArrival(): future time for event 1 at entity 0 will be
100087.90551469469
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -1949 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 99976.47633289594
Packet: 8 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 99976.48
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 99980.42707602165 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 99980.42707602165
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 99983.8729819636 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 99983.8729819636
Recieved ACK for last sent packet. Stopping Timer at 99983.8729819636
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 100087.90551469469 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 100087.90551469469

generateNextArrival(): future time for event 1 at entity 0 will be 100321.201208533
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload: bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 100087.90551469469
Packet: 9 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 100087.91
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 100090.94409009066 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 100117.90551469469 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 100117.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload: bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 100117.90551469469
Starting timer for packet 9 at time 100117.90551469469

_____

EVENT time: 100123.34247871337 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 100123.34247871337
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____

EVENT time: 100147.90551469469 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 100147.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
Retransmitting Packet 9
startTimer: starting timer at 100147.90551469469
Starting timer for packet 9 at time 100147.90551469469

_____

EVENT time: 100177.90551469469 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 100177.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 100177.90551469469
Starting timer for packet 9 at time 100177.90551469469

_____

EVENT time: 100187.27542954806 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 100187.27542954806
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 100195.09787285993 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 100195.09787285993
Recieved ACK for last sent packet. Stopping Timer at
100195.09787285993
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 100321.201208533 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 100321.201208533
generateNextArrival(): future time for event 1 at entity 0 will be
100574.57808160652
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1991 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 100321.201208533
Packet: 10 With Payload: cccccccccccccccccccc sent to B
Timer started at: 100321.20
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 100323.36085085607 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 100323.36085085607
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 100330.42356639304 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 100330.42356639304
Recieved ACK for last sent packet. Stopping Timer at
100330.42356639304
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 100574.57808160652 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 100574.57808160652
generateNextArrival(): future time for event 1 at entity 0 will be

100902.49336222422
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 100574.57808160652
Packet: 11 With Payload: dddddddddddddddddddd sent to B
Timer started at: 100574.58
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 100579.3319498276 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 100579.3319498276
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 100584.65684987948 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 100584.65684987948
Recieved ACK for last sent packet. Stopping Timer at
100584.65684987948
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 100902.49336222422 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 100902.49336222422
generateNextArrival(): future time for event 1 at entity 0 will be
100969.48759422594
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12

NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 100902.49336222422
Packet: 12 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 100902.49
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 100905.04000976596 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 100905.04000976596
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 100910.51322977389 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 100910.51322977389
Recieved ACK for last sent packet. Stopping Timer at
100910.51322977389
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 100969.48759422594 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 100969.48759422594
generateNextArrival(): future time for event 1 at entity 0 will be
101104.9409466842
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side

startTimer: starting timer at 100969.48759422594
Packet: 13 With Payload: ffffffffffffffffffff sent to B
Timer started at: 100969.49
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 100979.45710623497 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 100979.45710623497
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 100999.48759422594 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 100999.49
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffffff
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 100999.48759422594
Starting timer for packet 13 at time 100999.48759422594

_____

EVENT time: 101004.24503311262 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 101029.48759422594 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 101029.49
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 13

startTimer: starting timer at 101029.48759422594
Starting timer for packet 13 at time 101029.48759422594
_____

EVENT time: 101037.66930143136 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 101037.66930143136
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 101040.7328714866 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 101040.7328714866
Recieved ACK for last sent packet. Stopping Timer at 101040.7328714866
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 101104.9409466842 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101104.9409466842
generateNextArrival(): future time for event 1 at entity 0 will be
101171.6910306101
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2075 payload:
ggggggggggggggggggggg
toLayer3: packet being lost
startTimer: starting timer at 101104.9409466842
Packet: 14 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 101104.94
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 101134.9409466842 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 101134.94

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2075 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 101134.9409466842
Starting timer for packet 14 at time 101134.9409466842

_____

EVENT time: 101137.99050874359 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 101137.99050874359
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 101145.10623493152 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 101145.10623493152
Recieved ACK for last sent packet. Stopping Timer at
101145.10623493152
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 101171.6910306101 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101171.6910306101
generateNextArrival(): future time for event 1 at entity 0 will be
101175.60960722683
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 101171.6910306101
Packet: 15 With Payload: hhhhhhhhhhhhhhhhhhhhhh sent to B

Timer started at: 101171.69
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 101175.60960722683 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101175.60960722683
generateNextArrival(): future time for event 1 at entity 0 will be
101479.85473189494
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2101 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 101175.60960722683
startTimer: starting timer at 101175.60960722683
Packet: 0 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 101175.61
Packet added to retransmission buffer at index [1]
Next sequence number: 1
_____

EVENT time: 101179.39097262494 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 101179.39097262494
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
In order ACK 15 Sent

_____

EVENT time: 101180.98864711451 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 101180.98864711451
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

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EVENT time: 101184.71855830566 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Cumulative ACK 0received
stopTimer: stopping timer at 101184.71855830566
Recieved ACK for last sent packet. Stopping Timer at
101184.71855830566
Sliding window 2 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

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EVENT time: 101479.85473189494 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101479.85473189494
generateNextArrival(): future time for event 1 at entity 0 will be
101508.42005676447
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 101479.85473189494
Packet: 1 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 101479.85
Packet added to retransmission buffer at index [0]
Next sequence number: 2

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EVENT time: 101485.51719718013 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 101485.51719718013
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

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EVENT time: 101486.97067171244 type: 2 entity: 0

aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 101486.97067171244
Recieved ACK for last sent packet. Stopping Timer at
101486.97067171244
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 101508.42005676447 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101508.42005676447
generateNextArrival(): future time for event 1 at entity 0 will be
101741.49601733456
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 101508.42005676447
Packet: 2 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 101508.42
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 101516.0043641469 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 101516.0043641469
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 101523.69634083075 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK

Number of Corruped Packets to A: 63.0
_____

EVENT time: 101538.42005676447 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 101538.42
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 101538.42005676447
Starting timer for packet 2 at time 101538.42005676447

_____

EVENT time: 101541.70638142037 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 101541.70638142037
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 101545.72798852508 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 101545.72798852508
Recieved ACK for last sent packet. Stopping Timer at
101545.72798852508
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 101741.49601733456 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 101741.49601733456
generateNextArrival(): future time for event 1 at entity 0 will be
102120.93874935152
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2164 payload:

llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 101741.49601733456
Packet: 3 With Payload: llllllllllllllllllll sent to B
Timer started at: 101741.50
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 101748.47853022863 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 101748.47853022863
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 101754.83727530752 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 101754.83727530752
Recieved ACK for last sent packet. Stopping Timer at
101754.83727530752
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 102120.93874935152 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 102120.93874935152
generateNextArrival(): future time for event 1 at entity 0 will be
102143.18063905762
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2185 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 102120.93874935152
Packet: 4 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B

Timer started at: 102120.94
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 102125.04632709743 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 102125.04632709743
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 102127.7995239113 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 102127.7995239113
Recieved ACK for last sent packet. Stopping Timer at 102127.7995239113
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 102143.18063905762 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 102143.18063905762
generateNextArrival(): future time for event 1 at entity 0 will be
102386.96249275189
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2206 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 102143.18063905762
Packet: 5 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 102143.18
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 102151.13135166482 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 102151.13135166482
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 102158.71895504628 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 102158.71895504628
Recieved ACK for last sent packet. Stopping Timer at
102158.71895504628
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 102386.96249275189 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 102386.96249275189
generateNextArrival(): future time for event 1 at entity 0 will be
102589.89837336348
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2227 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 102386.96249275189
Packet: 6 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 102386.96
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 102390.76134525593 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13

Packet received is not corrupt. At time 102390.76134525593
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: packet being lost
In order ACK 6 Sent
_____

EVENT time: 102416.96249275189 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 102416.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2227 payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 102416.96249275189
Starting timer for packet 6 at time 102416.96249275189
_____

EVENT time: 102418.40827661981 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 102418.40827661981
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent
_____

EVENT time: 102421.26694540243 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 102421.26694540243
Recieved ACK for last sent packet. Stopping Timer at
102421.26694540243
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 102589.89837336348 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 102589.89837336348
generateNextArrival(): future time for event 1 at entity 0 will be

102894.70503860596
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 102589.89837336348
Packet: 7 With Payload: pppppppppppppppppppp sent to B
Timer started at: 102589.90
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 102594.00265511037 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 102594.00265511037
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 102601.5963011567 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 102601.5963011567
Recieved ACK for last sent packet. Stopping Timer at 102601.5963011567
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 102894.70503860596 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 102894.70503860596
generateNextArrival(): future time for event 1 at entity 0 will be
103224.86648152108
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window

toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 102894.70503860596
Packet: 8 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 102894.71
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 102898.44923245953 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 102898.44923245953
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being lost
In order ACK 8 Sent

_____

EVENT time: 102924.70503860596 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 102924.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2269 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 102924.70503860596
Starting timer for packet 8 at time 102924.70503860596
_____

EVENT time: 102926.98718222606 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 102926.98718222606
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 102930.00625629448 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15

Expected ACK 8 received
stopTimer: stopping timer at 102930.00625629448
Recieved ACK for last sent packet. Stopping Timer at
102930.00625629448
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 103224.86648152108 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 103224.86648152108
generateNextArrival(): future time for event 1 at entity 0 will be
103477.16910306104
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 103224.86648152108
Packet: 9 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 103224.87
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 103226.31501205485 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 103226.31501205485
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent
_____

EVENT time: 103254.86648152108 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 103254.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost

Retransmitting Packet 9
startTimer: starting timer at 103254.86648152108
Starting timer for packet 9 at time 103254.86648152108
_____

EVENT time: 103284.86648152108 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 103284.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
Retransmitting Packet 9
startTimer: starting timer at 103284.86648152108
Starting timer for packet 9 at time 103284.86648152108
_____

EVENT time: 103314.86648152108 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 103314.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2290 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 103314.86648152108
Starting timer for packet 9 at time 103314.86648152108
_____

EVENT time: 103317.22690511799 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 103317.22690511799
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent
_____

EVENT time: 103318.42741172525 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 103318.42741172525
Recieved ACK for last sent packet. Stopping Timer at
103318.42741172525
Sliding window 1 times

New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 103477.16910306104 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 103477.16910306104
generateNextArrival(): future time for event 1 at entity 0 will be
103807.08639790036
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2311 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 103477.16910306104
Packet: 10 With Payload: sssssssssssssssssssss sent to B
Timer started at: 103477.17
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 103486.44013794369 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 103486.44013794369
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 103490.7677236244 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 103490.7677236244
Recieved ACK for last sent packet. Stopping Timer at 103490.7677236244
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 103807.08639790036 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 103807.08639790036
generateNextArrival(): future time for event 1 at entity 0 will be
104120.92654194773
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2332 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 103807.08639790036
Packet: 11 With Payload: tttttttttttttttttttt sent to B
Timer started at: 103807.09
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 103815.79134495075 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 103815.79134495075
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 103818.90215765865 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 103818.90215765865
Recieved ACK for last sent packet. Stopping Timer at
103818.90215765865
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 104120.92654194773 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 104120.92654194773
generateNextArrival(): future time for event 1 at entity 0 will be

104257.69829401535
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2353 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 104120.92654194773
Packet: 12 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 104120.93
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 104125.27115695673 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 104125.27115695673
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 104126.35108493305 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 104126.35108493305
Recieved ACK for last sent packet. Stopping Timer at
104126.35108493305
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 104257.69829401535 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 104257.69829401535
generateNextArrival(): future time for event 1 at entity 0 will be
104414.4047364727
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13

NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2374 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 104257.69829401535
Packet: 13 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 104257.70
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 104266.72212897126 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 104266.72212897126
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 104274.00622577597 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 104274.00622577597
Recieved ACK for last sent packet. Stopping Timer at
104274.00622577597
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 104414.4047364727 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 104414.4047364727
generateNextArrival(): future time for event 1 at entity 0 will be
104667.9280983917
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side

startTimer: starting timer at 104414.4047364727
Packet: 14 With Payload: wwwwwwwwwwwwwwwwwww sent to B
Timer started at: 104414.40
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 104416.50697347945 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 104416.50697347945
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
In order ACK 14 Sent

_____

EVENT time: 104444.4047364727 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 104444.40
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 104444.4047364727
Starting timer for packet 14 at time 104444.4047364727

_____

EVENT time: 104454.28113650932 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 104454.28113650932
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 104461.91625721003 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 104461.91625721003
Recieved ACK for last sent packet. Stopping Timer at

104461.91625721003
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 104667.9280983917 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 104667.9280983917
generateNextArrival(): future time for event 1 at entity 0 will be
104759.30051576284
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 104667.9280983917
Packet: 15 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 104667.93
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 104671.80495620596 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 104671.80495620596
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 104678.87755974001 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 104678.87755974001
Recieved ACK for last sent packet. Stopping Timer at
104678.87755974001
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 104759.30051576284 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 104759.30051576284
generateNextArrival(): future time for event 1 at entity 0 will be
104895.49851985232
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 104759.30051576284
Packet: 0 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 104759.30
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 104761.97653126623 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 104761.97653126623
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 104769.33588671531 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 104769.33588671531
Recieved ACK for last sent packet. Stopping Timer at
104769.33588671531
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 104895.49851985232 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 104895.49851985232
generateNextArrival(): future time for event 1 at entity 0 will be
105152.06152531513
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2442 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 104895.49851985232
Packet: 1 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 104895.50
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 104903.61870174264 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 104903.61870174264
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 104905.66380809965 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 104905.66380809965
Recieved ACK for last sent packet. Stopping Timer at
104905.66380809965
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 105152.06152531513 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 105152.06152531513
generateNextArrival(): future time for event 1 at entity 0 will be
105324.10046693322

```
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -1943  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 105152.06152531513
Packet: 2 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 105152.06
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____


EVENT time: 105156.75414288769  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 105156.75414288769
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 3      rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 105163.49055452134  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 105163.49055452134
Recieved ACK for last sent packet. Stopping Timer at
105163.49055452134
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 105324.10046693322  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 105324.10046693322
generateNextArrival(): future time for event 1 at entity 0 will be
105457.82036805325
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
```

toLayer3: seqnum: 3 acknum: 0 checksum: −1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 105324.10046693322
Packet: 3 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 105324.10
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 105331.40214239938 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 105331.40214239938
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 105337.7119968261 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 105337.7119968261
Recieved ACK for last sent packet. Stopping Timer at 105337.7119968261
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 105457.82036805325 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 105457.82036805325
generateNextArrival(): future time for event 1 at entity 0 will be
105685.00015259258
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −1985 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 105457.82036805325
Packet: 4 With Payload: cccccccccccccccccccc sent to B

Timer started at: 105457.82
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 105459.14365062413 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 105459.14365062413
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 105467.26685384689 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 105467.26685384689
Recieved ACK for last sent packet. Stopping Timer at
105467.26685384689
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 105685.00015259258 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 105685.00015259258
generateNextArrival(): future time for event 1 at entity 0 will be
105760.69826349684
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2006 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 105685.00015259258
Packet: 5 With Payload: dddddddddddddddddddd sent to B
Timer started at: 105685.00
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 105689.76390881072 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 105689.76390881072
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 105697.149632252 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 105697.149632252
Recieved ACK for last sent packet. Stopping Timer at 105697.149632252
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 105760.69826349684 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 105760.69826349684
generateNextArrival(): future time for event 1 at entity 0 will be
106003.32041383102
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 105760.69826349684
Packet: 6 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 105760.70
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 105766.21680349135 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13

Packet received is not corrupt. At time 105766.21680349135
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 105774.4836573382 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 105774.4836573382
Recieved ACK for last sent packet. Stopping Timer at 105774.4836573382
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 106003.32041383102 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106003.32041383102
generateNextArrival(): future time for event 1 at entity 0 will be
106092.9837946715
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2048 payload:
ffffffffffffffffffff
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106003.32041383102
Packet: 7 With Payload: ffffffffffffffffffff sent to B
Timer started at: 106003.32
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 106010.95278786587 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____

```
EVENT time: 106033.32041383102  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 106033.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2048  payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 106033.32041383102
Starting timer for packet 7 at time 106033.32041383102

_____


EVENT time: 106063.32041383102  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 106063.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2048  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 106063.32041383102
Starting timer for packet 7 at time 106063.32041383102

_____


EVENT time: 106068.9067964721  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 106068.9067964721
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 8      rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 106072.95779290143  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 106072.95779290143
Recieved ACK for last sent packet. Stopping Timer at
106072.95779290143
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____
```

```
EVENT time: 106092.9837946715  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106092.9837946715
generateNextArrival(): future time for event 1 at entity 0 will be
106396.4720603046
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2069  payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106092.9837946715
Packet: 8 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 106092.98
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 106094.42930387284  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 106094.42930387284
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 9     rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: packet being lost
In order ACK 8 Sent

_____


EVENT time: 106122.9837946715  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 106122.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2069  payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 106122.9837946715
Starting timer for packet 8 at time 106122.9837946715

_____


EVENT time: 106130.48130741298  type: 2  entity: 1
bInput() _____
```

Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 106130.48130741298
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____

EVENT time: 106131.74196600242 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 106131.74196600242
Recieved ACK for last sent packet. Stopping Timer at
106131.74196600242
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 106396.4720603046 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106396.4720603046
generateNextArrival(): future time for event 1 at entity 0 will be
106435.18173772395
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106396.4720603046
Packet: 9 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 106396.47
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 106406.13449507128 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 106406.13449507128
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side

In order ACK 9 Sent

_____

EVENT time: 106408.90664387953 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 106408.90664387953
Recieved ACK for last sent packet. Stopping Timer at
106408.90664387953
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 106435.18173772395 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106435.18173772395
generateNextArrival(): future time for event 1 at entity 0 will be
106781.50578325757
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2111 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106435.18173772395
Packet: 10 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 106435.18
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 106442.94540238657 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 106442.94540238657
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

```
EVENT time: 106445.00094607382  type: 2  entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 106445.00094607382
Recieved ACK for last sent packet. Stopping Timer at
106445.00094607382
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 106781.50578325757  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106781.50578325757
generateNextArrival(): future time for event 1 at entity 0 will be
106850.8926664022
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2132  payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106781.50578325757
Packet: 11 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 106781.51
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____


EVENT time: 106791.05285805844  type: 2  entity: 1
bInput() _____
Packet 999999 received. rcv_base: 11     rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 106811.50578325757  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 106811.51
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11  acknum: 0  checksum: -2132  payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
```

startTimer: starting timer at 106811.50578325757
Starting timer for packet 11 at time 106811.50578325757
_____

EVENT time: 106816.25772881255 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 106841.50578325757 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 106841.51
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 106841.50578325757
Starting timer for packet 11 at time 106841.50578325757
_____

EVENT time: 106844.39494003115 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 106844.39494003115
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message jjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 106850.43974120307 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 106850.43974120307
Recieved ACK for last sent packet. Stopping Timer at
106850.43974120307
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 106850.8926664022 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 106850.8926664022
generateNextArrival(): future time for event 1 at entity 0 will be
107003.70494705041
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 106850.8926664022
Packet: 12 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 106850.89
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 106852.04373302411 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 106852.04373302411
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 106861.73555711542 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 106861.73555711542
Recieved ACK for last sent packet. Stopping Timer at
106861.73555711542
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107003.70494705041 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107003.70494705041

generateNextArrival(): future time for event 1 at entity 0 will be
107387.945188757
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107003.70494705041
Packet: 13 With Payload: lllllllllllllllllll sent to B
Timer started at: 107003.70
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 107011.93829157387 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 107011.93829157387
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 107014.00454725794 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 107014.00454725794
Recieved ACK for last sent packet. Stopping Timer at
107014.00454725794
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107387.945188757 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107387.945188757
generateNextArrival(): future time for event 1 at entity 0 will be
107643.3729056673
aOutput()_____
Send_Base: 14 Send_end: 5

NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2195 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107387.945188757
Packet: 14 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 107387.95
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 107392.69191564686 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 107392.69191564686
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 107398.74413281657 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 107398.74413281657
Recieved ACK for last sent packet. Stopping Timer at
107398.74413281657
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107643.3729056673 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107643.3729056673
generateNextArrival(): future time for event 1 at entity 0 will be
107852.24158452103
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnnn

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107643.3729056673
Packet: 15 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 107643.37
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____


EVENT time: 107653.10043641471  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 107653.10043641471
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 0      rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 107659.21225623343  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 107659.21225623343
Recieved ACK for last sent packet. Stopping Timer at
107659.21225623343
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 107852.24158452103  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107852.24158452103
generateNextArrival(): future time for event 1 at entity 0 will be
107854.1947691275
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2221  payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107852.24158452103
Packet: 0 With Payload: oooooooooooooooooooo sent to B
Timer started at: 107852.24
```

Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 107854.1947691275 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107854.1947691275
generateNextArrival(): future time for event 1 at entity 0 will be
107956.50502029483
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2242 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 107854.1947691275
startTimer: starting timer at 107854.1947691275
Packet: 1 With Payload: pppppppppppppppppppp sent to B
Timer started at: 107854.19
Packet added to retransmission buffer at index [1]
Next sequence number: 2
_____

EVENT time: 107861.9993285928 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 107861.9993285928
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 107866.09344767603 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107866.33625293743 type: 2 entity: 1

bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 107866.33625293743
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 107870.45014801479 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 107870.45014801479
Recieved ACK for last sent packet. Stopping Timer at
107870.45014801479
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107956.50502029483 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107956.50502029483
generateNextArrival(): future time for event 1 at entity 0 will be
107997.08243049412
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107956.50502029483
Packet: 2 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 107956.51
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 107961.80382702111 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 107961.80382702111
Packet received is in order. Delivering packet(s) to layer5

Packet 2 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 107971.4157231361 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 107971.4157231361
Recieved ACK for last sent packet. Stopping Timer at 107971.4157231361
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 107997.08243049412 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 107997.08243049412
generateNextArrival(): future time for event 1 at entity 0 will be
108374.3400372326
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 107997.08243049412
Packet: 3 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 107997.08
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 108004.9103671377 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 108004.9103671377
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 108013.88256477556 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 108013.88256477556
Recieved ACK for last sent packet. Stopping Timer at
108013.88256477556
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 108374.3400372326 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 108374.3400372326
generateNextArrival(): future time for event 1 at entity 0 will be
108619.74547563099
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2305 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 108374.3400372326
Packet: 4 With Payload: ssssssssssssssssssss sent to B
Timer started at: 108374.34
Packet added to retransmission buffer at index [0]
Next sequence number: 5

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EVENT time: 108381.24344615011 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 108381.24344615011
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 108382.49256874296 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 108382.49256874296
Recieved ACK for last sent packet. Stopping Timer at
108382.49256874296
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 108619.74547563099  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 108619.74547563099
generateNextArrival(): future time for event 1 at entity 0 will be
108703.41502121039
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2326  payload:
tttttttttttttttttttt
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 108619.74547563099
Packet: 5 With Payload: tttttttttttttttttttt sent to B
Timer started at: 108619.75
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____


EVENT time: 108627.4047669912  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5        rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 108649.74547563099  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 108649.75
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2326  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 108649.74547563099
Starting timer for packet 5 at time 108649.74547563099
```

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EVENT time: 108652.90929898985 type: 2 entity: 1
bInput() ——————————————————————————
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 108652.90929898985
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

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EVENT time: 108657.81286049991 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 108657.81286049991
Recieved ACK for last sent packet. Stopping Timer at
108657.81286049991
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

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EVENT time: 108703.41502121039 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 108703.41502121039
generateNextArrival(): future time for event 1 at entity 0 will be
109058.82137516406
aOutput()——————————————————————————
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 108703.41502121039
Packet: 6 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 108703.42
Packet added to retransmission buffer at index [0]
Next sequence number: 7

——————————————————————————

EVENT time: 108707.40778832365 type: 2 entity: 1

bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 108707.40778832365
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 108717.1268044069 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 108717.1268044069
Recieved ACK for last sent packet. Stopping Timer at 108717.1268044069
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 109058.82137516406 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109058.82137516406
generateNextArrival(): future time for event 1 at entity 0 will be
109173.54655598622
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109058.82137516406
Packet: 7 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 109058.82
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 109060.60472426529 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 109060.60472426529
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5

New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

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EVENT time: 109068.03961302532 type: 2 entity: 0
aInput()——————————————————————————————
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 109068.03961302532
Recieved ACK for last sent packet. Stopping Timer at
109068.03961302532
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

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EVENT time: 109173.54655598622 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109173.54655598622
generateNextArrival(): future time for event 1 at entity 0 will be
109468.64833521533
aOutput()——————————————————————————————
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2389 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109173.54655598622
Packet: 8 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 109173.55
Packet added to retransmission buffer at index [0]
Next sequence number: 9

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EVENT time: 109179.4759971923 type: 2 entity: 1
bInput() ——————————————————————————————
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 109179.4759971923
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

————————————————————————

EVENT time: 109186.59941404463 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 109186.59941404463
Recieved ACK for last sent packet. Stopping Timer at
109186.59941404463
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

————————————————————————

EVENT time: 109468.64833521533 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109468.64833521533
generateNextArrival(): future time for event 1 at entity 0 will be
109536.68019653922
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109468.64833521533
Packet: 9 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 109468.65
Packet added to retransmission buffer at index [0]
Next sequence number: 10

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EVENT time: 109475.99917600026 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 109475.99917600026
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

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EVENT time: 109480.52919095433 type: 2 entity: 0

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aInput()_____
Current Send_Base: 9    Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 109480.52919095433
Recieved ACK for last sent packet. Stopping Timer at
109480.52919095433
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 109536.68019653922  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109536.68019653922
generateNextArrival(): future time for event 1 at entity 0 will be
109572.42347483752
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10  acknum: 0  checksum: -2431  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109536.68019653922
Packet: 10 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 109536.68
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____


EVENT time: 109542.15286721398  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 109542.15286721398
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 11     rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____


EVENT time: 109547.35114597005  type: 2  entity: 0
aInput()_____
Current Send_Base: 10    Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 109547.35114597005
```

Recieved ACK for last sent packet. Stopping Timer at
109547.35114597005
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 109572.42347483752 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109572.42347483752
generateNextArrival(): future time for event 1 at entity 0 will be
109860.72573015536
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2452 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109572.42347483752
Packet: 11 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 109572.42
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 109573.66133610037 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 109573.66133610037
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 109581.93862727747 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 109581.93862727747
Recieved ACK for last sent packet. Stopping Timer at
109581.93862727747
Sliding window 1 times
New send_base: 12 send_end: 3

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 109860.72573015536 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 109860.72573015536
generateNextArrival(): future time for event 1 at entity 0 will be
110149.52848902861
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 109860.72573015536
Packet: 12 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 109860.73
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 109866.66753135779 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 109866.66753135779
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 109871.7268288217 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 109871.7268288217
Recieved ACK for last sent packet. Stopping Timer at 109871.7268288217
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 110149.52848902861 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 110149.52848902861
generateNextArrival(): future time for event 1 at entity 0 will be
110528.78810998873
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -1974  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 110149.52848902861
Packet: 13 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 110149.53
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 110153.58140812404  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 110153.58140812404
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 14      rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____


EVENT time: 110158.08505508592  type: 2  entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 110158.08505508592
Recieved ACK for last sent packet. Stopping Timer at
110158.08505508592
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 110528.78810998873  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 110528.78810998873
generateNextArrival(): future time for event 1 at entity 0 will be
110780.27283547474
```

```
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -1995  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 110528.78810998873
Packet: 14 With Payload: cccccccccccccccccccc sent to B
Timer started at: 110528.79
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 110534.62498855559  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14       rcv_end: 5
Packet received is not corrupt. At time 110534.62498855559
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 15      rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 110538.39390240183  type: 2  entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 110538.39390240183
Recieved ACK for last sent packet. Stopping Timer at
110538.39390240183
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 110780.27283547474  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 110780.27283547474
generateNextArrival(): future time for event 1 at entity 0 will be
110933.32926419876
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
```

toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 110780.27283547474
Packet: 15 With Payload: dddddddddddddddddddd sent to B
Timer started at: 110780.27
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 110788.09802545246 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 110788.09802545246
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost
In order ACK 15 Sent

_____

EVENT time: 110810.27283547474 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 110810.27
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 110810.27283547474
Starting timer for packet 15 at time 110810.27283547474

_____

EVENT time: 110817.23364970856 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 110817.23364970856
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 110818.63136692405 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6

Expected ACK 15 received
stopTimer: stopping timer at 110818.63136692405
Recieved ACK for last sent packet. Stopping Timer at
110818.63136692405
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 110933.32926419876 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 110933.32926419876
generateNextArrival(): future time for event 1 at entity 0 will be
111327.88476210825
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2021 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 110933.32926419876
Packet: 0 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 110933.33
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 110935.11783196511 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 110935.11783196511
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 110936.45869319745 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 110936.45869319745
Recieved ACK for last sent packet. Stopping Timer at
110936.45869319745

Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 111327.88476210825 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 111327.88476210825
generateNextArrival(): future time for event 1 at entity 0 will be
111362.5293740654
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 111327.88476210825
Packet: 1 With Payload: ffffffffffffffffffff sent to B
Timer started at: 111327.88
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 111332.357371746 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 111332.357371746
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 111336.90496536152 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 111336.90496536152
Recieved ACK for last sent packet. Stopping Timer at
111336.90496536152
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 111362.5293740654 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 111362.5293740654
generateNextArrival(): future time for event 1 at entity 0 will be
111610.55940427873
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 111362.5293740654
Packet: 2 With Payload: gggggggggggggggggggg sent to B
Timer started at: 111362.53
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 111366.4746238594 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 111366.4746238594
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 111374.94061098059 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 111374.94061098059
Recieved ACK for last sent packet. Stopping Timer at
111374.94061098059
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 111610.55940427873 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 111610.55940427873
generateNextArrival(): future time for event 1 at entity 0 will be
111717.05679494617
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 111610.55940427873
Packet: 3 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 111610.56
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 111611.58247627188 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 111611.58247627188
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 111640.55940427873 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 111640.56
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: packet being lost
Retransmitting Packet 3
startTimer: starting timer at 111640.55940427873
Starting timer for packet 3 at time 111640.55940427873

_____

EVENT time: 111670.55940427873 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 111670.56
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh

toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 111670.55940427873
Starting timer for packet 3 at time 111670.55940427873

_____

EVENT time: 111673.36753440966 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 111673.36753440966
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 111677.99560533467 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 111677.99560533467
Recieved ACK for last sent packet. Stopping Timer at
111677.99560533467
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 111717.05679494617 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 111717.05679494617
generateNextArrival(): future time for event 1 at entity 0 will be
111965.69719534901
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2105 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 111717.05679494617
Packet: 4 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 111717.06
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 111726.85985900451 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 111726.85985900451
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 111729.10602130195 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 111729.10602130195
Recieved ACK for last sent packet. Stopping Timer at
111729.10602130195
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 111965.69719534901 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 111965.69719534901
generateNextArrival(): future time for event 1 at entity 0 will be
112181.7194128239
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 111965.69719534901
Packet: 5 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 111965.70
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 111973.98272652367 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 111973.98272652367

Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 111980.42139957887 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 111980.42139957887
Recieved ACK for last sent packet. Stopping Timer at
111980.42139957887
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 112181.7194128239 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 112181.7194128239
generateNextArrival(): future time for event 1 at entity 0 will be
112496.96340830717
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 112181.7194128239
Packet: 6 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 112181.72
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 112191.24671163064 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 112191.24671163064
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:

toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 112195.5341959899 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 112195.5341959899
Recieved ACK for last sent packet. Stopping Timer at 112195.5341959899
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 112496.96340830717 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 112496.96340830717
generateNextArrival(): future time for event 1 at entity 0 will be
112720.09033478808
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 112496.96340830717
Packet: 7 With Payload: lllllllllllllllllll sent to B
Timer started at: 112496.96
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 112502.27896969515 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 112502.27896969515
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 112511.28934598838 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 112511.28934598838
Recieved ACK for last sent packet. Stopping Timer at
112511.28934598838
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 112720.09033478808 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 112720.09033478808
generateNextArrival(): future time for event 1 at entity 0 will be
112784.9116489151
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2189 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 112720.09033478808
Packet: 8 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 112720.09
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 112729.83352153085 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 112729.83352153085
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 112739.34516434222 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received

stopTimer: stopping timer at 112739.34516434222
Recieved ACK for last sent packet. Stopping Timer at
112739.34516434222
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 112784.9116489151 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 112784.9116489151
generateNextArrival(): future time for event 1 at entity 0 will be
113074.84969634087
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2210 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 112784.9116489151
Packet: 9 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 112784.91
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 112791.7799005097 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 112791.7799005097
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 112799.99484237195 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Received Corrupted ACK
Number of Corruped Packets to A: 64.0
_____

EVENT time: 112814.9116489151 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 112814.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: −2210 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 112814.9116489151
Starting timer for packet 9 at time 112814.9116489151

_____

EVENT time: 112816.11792352065 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 112816.11792352065
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 112824.13235877563 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 112824.13235877563
Recieved ACK for last sent packet. Stopping Timer at
112824.13235877563
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 113074.84969634087 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 113074.84969634087
generateNextArrival(): future time for event 1 at entity 0 will be
113296.01123081152
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2231 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 113074.84969634087

Packet: 10 With Payload: oooooooooooooooooooo sent to B
Timer started at: 113074.85
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 113077.14859462267 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 113077.14859462267
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 113082.62840662866 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 113082.62840662866
Recieved ACK for last sent packet. Stopping Timer at
113082.62840662866
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 113296.01123081152 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 113296.01123081152
generateNextArrival(): future time for event 1 at entity 0 will be
113353.27616199228
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2252 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 113296.01123081152
Packet: 11 With Payload: pppppppppppppppppppp sent to B
Timer started at: 113296.01
Packet added to retransmission buffer at index [0]
Next sequence number: 12

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EVENT time: 113298.76689962465 type: 2 entity: 1
bInput() ———————————————————————
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 113298.76689962465
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

———————————————————————

EVENT time: 113302.18836024051 type: 2 entity: 0
aInput()———————————————————————
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 113302.18836024051
Recieved ACK for last sent packet. Stopping Timer at
113302.18836024051
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

———————————————————————

EVENT time: 113353.27616199228 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 113353.27616199228
generateNextArrival(): future time for event 1 at entity 0 will be
113705.28885769223
aOutput()———————————————————————
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2273 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 113353.27616199228
Packet: 12 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 113353.28
Packet added to retransmission buffer at index [0]
Next sequence number: 13

———————————————————————

EVENT time: 113359.82058168283 type: 2 entity: 1

```
bInput() _____
Packet 12 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 113359.82058168283
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 13       rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____


EVENT time: 113364.24842066717  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 113364.24842066717
Recieved ACK for last sent packet. Stopping Timer at
113364.24842066717
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 113705.28885769223  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 113705.28885769223
generateNextArrival(): future time for event 1 at entity 0 will be
113870.00335703608
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2294  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 113705.28885769223
Packet: 13 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 113705.29
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 113711.58388012333  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13        rcv_end: 4
Packet received is not corrupt. At time 113711.58388012333
Packet received is in order. Delivering packet(s) to layer5
```

Packet 13 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 113715.51237525562 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 113715.51237525562
Recieved ACK for last sent packet. Stopping Timer at
113715.51237525562
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 113870.00335703608 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 113870.00335703608
generateNextArrival(): future time for event 1 at entity 0 will be
114218.0974761193
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 113870.00335703608
Packet: 14 With Payload: sssssssssssssssssss sent to B
Timer started at: 113870.00
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 113872.3582873013 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 113872.3582873013
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side

In order ACK 14 Sent

_____

EVENT time: 113875.92339854126 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 113875.92339854126
Recieved ACK for last sent packet. Stopping Timer at
113875.92339854126
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 114218.0974761193 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 114218.0974761193
generateNextArrival(): future time for event 1 at entity 0 will be
114419.20224616234
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2336 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 114218.0974761193
Packet: 15 With Payload: tttttttttttttttttttt sent to B
Timer started at: 114218.10
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 114221.77245399338 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 114221.77245399338
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

```
EVENT time: 114224.83382671594  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 114224.83382671594
Recieved ACK for last sent packet. Stopping Timer at
114224.83382671594
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 114419.20224616234  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 114419.20224616234
generateNextArrival(): future time for event 1 at entity 0 will be
114597.24723044531
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2341  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 114419.20224616234
Packet: 0 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 114419.20
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 114422.86184270764  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 114422.86184270764
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 1      rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 114430.0910061953  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
```

stopTimer: stopping timer at 114430.0910061953
Recieved ACK for last sent packet. Stopping Timer at 114430.0910061953
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 114597.24723044531 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 114597.24723044531
generateNextArrival(): future time for event 1 at entity 0 will be
114768.87112033453
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2362 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 114597.24723044531
Packet: 1 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 114597.25
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 114603.56065553763 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 114603.56065553763
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 114609.68291268659 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 114609.68291268659
Recieved ACK for last sent packet. Stopping Timer at
114609.68291268659
Sliding window 1 times
New send_base: 2 send_end: 9

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 114768.87112033453 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 114768.87112033453
generateNextArrival(): future time for event 1 at entity 0 will be
114937.39432966098
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2383 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
startTimer: starting timer at 114768.87112033453
Packet: 2 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 114768.87
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 114798.87112033453 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 114798.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2383 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 114798.87112033453
Starting timer for packet 2 at time 114798.87112033453

_____

EVENT time: 114803.52391125222 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 114803.52391125222
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being lost
In order ACK 2 Sent

_____

```
EVENT time: 114828.87112033453  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 114828.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2383  payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 114828.87112033453
Starting timer for packet 2 at time 114828.87112033453


_____


EVENT time: 114838.39484847565  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 3      rcv_end: 10
Packet received is corrupted. Discarding and ignoring packet


_____


EVENT time: 114858.87112033453  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 114858.87
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2383  payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 114858.87112033453
Starting timer for packet 2 at time 114858.87112033453


_____


EVENT time: 114867.76998199413  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 3      rcv_end: 10
Packet received is not corrupt. At time 114867.76998199413
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent


_____


EVENT time: 114877.5576647237  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 114877.5576647237
Recieved ACK for last sent packet. Stopping Timer at 114877.5576647237
```

Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 114937.39432966098 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 114937.39432966098
generateNextArrival(): future time for event 1 at entity 0 will be
115223.29172643211
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 114937.39432966098
Packet: 3 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 114937.39
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 114944.09558397172 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 114967.39432966098 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 114967.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 114967.39432966098
Starting timer for packet 3 at time 114967.39432966098

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EVENT time: 114976.84444715724 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10

Packet received is not corrupt. At time 114976.84444715724
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 114982.86837366868 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 114982.86837366868
Recieved ACK for last sent packet. Stopping Timer at
114982.86837366868
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 115223.29172643211 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 115223.29172643211
generateNextArrival(): future time for event 1 at entity 0 will be
115340.47059541615
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 115223.29172643211
Packet: 4 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 115223.29
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 115232.1235694449 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 115232.1235694449
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 5   rcv_end = 12

toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____

EVENT time: 115236.78762169258 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 115236.78762169258
Recieved ACK for last sent packet. Stopping Timer at
115236.78762169258
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 115340.47059541615 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 115340.47059541615
generateNextArrival(): future time for event 1 at entity 0 will be
115598.254341258
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2446 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 115340.47059541615
Packet: 5 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 115340.47
Packet added to retransmission buffer at index [0]
Next sequence number: 6

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EVENT time: 115343.43363750118 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 115343.43363750118
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 115347.52198858612 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 115347.52198858612
Recieved ACK for last sent packet. Stopping Timer at
115347.52198858612
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 115598.254341258 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 115598.254341258
generateNextArrival(): future time for event 1 at entity 0 will be
115696.69484542377
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1947 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 115598.254341258
Packet: 6 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 115598.25
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 115607.6962187567 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 115628.254341258 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 115628.25
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -1947 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side

Retransmitting Packet 6
startTimer: starting timer at 115628.254341258
Starting timer for packet 6 at time 115628.254341258
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EVENT time: 115635.96966460161 type: 2 entity: 1
bInput() ———————————————————————————————
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 115635.96966460161
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message aaaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

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EVENT time: 115637.13089388717 type: 2 entity: 0
aInput()———————————————————————————————
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 115637.13089388717
Recieved ACK for last sent packet. Stopping Timer at
115637.13089388717
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

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EVENT time: 115696.69484542377 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 115696.69484542377
generateNextArrival(): future time for event 1 at entity 0 will be
116010.193182165
aOutput()———————————————————————————————
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -1968 payload:
bbbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 115696.69484542377
Packet: 7 With Payload: bbbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 115696.69
Packet added to retransmission buffer at index [0]
Next sequence number: 8

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EVENT time: 115699.01242103337 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 115699.01242103337
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 115705.10336619162 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 115705.10336619162
Recieved ACK for last sent packet. Stopping Timer at
115705.10336619162
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 116010.193182165 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116010.193182165
generateNextArrival(): future time for event 1 at entity 0 will be
116228.74233222452
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -1989 payload:
cccccccccccccccccccc
toLayer3: packet being lost
startTimer: starting timer at 116010.193182165
Packet: 8 With Payload: cccccccccccccccccccc sent to B
Timer started at: 116010.19
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 116040.193182165 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 116040.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -1989 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 116040.193182165
Starting timer for packet 8 at time 116040.193182165

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EVENT time: 116043.46247749262 type: 2 entity: 1
bInput() ——————————————————————————
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 116043.46247749262
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

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EVENT time: 116045.80065309613 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 65.0

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EVENT time: 116070.193182165 type: 0 entity: 0
aTimerInterrup()——————————————————————————
TIMEOUT!!! at: 116070.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -1989 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 116070.193182165
Starting timer for packet 8 at time 116070.193182165

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EVENT time: 116072.43494979707 type: 2 entity: 1
bInput() ——————————————————————————
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 116072.43494979707

toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent
_____

EVENT time: 116081.8782006287 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 116081.8782006287
Recieved ACK for last sent packet. Stopping Timer at 116081.8782006287
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 116228.74233222452 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116228.74233222452
generateNextArrival(): future time for event 1 at entity 0 will be
116307.0772423475
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2010 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116228.74233222452
Packet: 9 With Payload: dddddddddddddddddddd sent to B
Timer started at: 116228.74
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 116230.84154789882 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 116230.84154789882
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 116233.94824060795 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 116233.94824060795
Recieved ACK for last sent packet. Stopping Timer at
116233.94824060795
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 116307.0772423475 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116307.0772423475
generateNextArrival(): future time for event 1 at entity 0 will be
116472.4753563036
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2031 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116307.0772423475
Packet: 10 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 116307.08
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 116308.55241554003 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 116308.55241554003
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 116309.80895413068 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1

Expected ACK 10 received
stopTimer: stopping timer at 116309.80895413068
Recieved ACK for last sent packet. Stopping Timer at
116309.80895413068
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 116472.4753563036 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116472.4753563036
generateNextArrival(): future time for event 1 at entity 0 will be
116478.44477675711
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2052 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116472.4753563036
Packet: 11 With Payload: ffffffffffffffffffff sent to B
Timer started at: 116472.48
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 116473.7143162328 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 116473.7143162328
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 116477.03552354504 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 116477.03552354504
Recieved ACK for last sent packet. Stopping Timer at
116477.03552354504

Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 116478.44477675711 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116478.44477675711
generateNextArrival(): future time for event 1 at entity 0 will be
116811.7191076388
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2073 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116478.44477675711
Packet: 12 With Payload: gggggggggggggggggggg sent to B
Timer started at: 116478.44
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 116482.58888515885 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 116482.58888515885
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 116485.33960997345 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 116485.33960997345
Recieved ACK for last sent packet. Stopping Timer at
116485.33960997345
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 116811.7191076388 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 116811.7191076388
generateNextArrival(): future time for event 1 at entity 0 will be
116986.99301126135
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2094 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116811.7191076388
Packet: 13 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 116811.72
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 116814.4901577807 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 116814.4901577807
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 116823.50135807368 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 116823.50135807368
Recieved ACK for last sent packet. Stopping Timer at
116823.50135807368
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 116986.99301126135 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 116986.99301126135
generateNextArrival(): future time for event 1 at entity 0 will be
117315.95812860502
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2115 payload:
iiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 116986.99301126135
Packet: 14 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 116986.99
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 116990.79680776392 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 116990.79680776392
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 116997.20966216011 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 116997.20966216011
Recieved ACK for last sent packet. Stopping Timer at
116997.20966216011
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 117315.95812860502 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 117315.95812860502
generateNextArrival(): future time for event 1 at entity 0 will be
117576.54957731867
aOutput()_____

Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 117315.95812860502
Packet: 15 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 117315.96
Packet added to retransmission buffer at index [0]
Next sequence number: 0
————————————————————————————————

EVENT time: 117322.0446790979 type: 2 entity: 1
bInput() ————————————————————————————————
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 117322.0446790979
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

————————————————————————————————

EVENT time: 117328.09277626884 type: 2 entity: 0
aInput()————————————————————————————————————
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 66.0

————————————————————————————————

EVENT time: 117345.95812860502 type: 0 entity: 0
aTimerInterrup()————————————————————————————————
TIMEOUT!!! at: 117345.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 117345.95812860502
Starting timer for packet 15 at time 117345.95812860502

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EVENT time: 117353.14883877074 type: 2 entity: 1

```
bInput() _____
Packet 15 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 117353.14883877074
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____


EVENT time: 117355.85369426559  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 117355.85369426559
Recieved ACK for last sent packet. Stopping Timer at
117355.85369426559
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 117576.54957731867  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 117576.54957731867
generateNextArrival(): future time for event 1 at entity 0 will be
117914.19415875731
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2141  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 117576.54957731867
Packet: 0 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 117576.55
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 117580.26163518177  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 117580.26163518177
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 117588.02584917756 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 117588.02584917756
Recieved ACK for last sent packet. Stopping Timer at
117588.02584917756
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 117914.19415875731 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 117914.19415875731
generateNextArrival(): future time for event 1 at entity 0 will be
118144.70656453141
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2162 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 117914.19415875731
Packet: 1 With Payload: llllllllllllllllllll sent to B
Timer started at: 117914.19
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 117923.84395886108 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 117923.84395886108
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

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```
EVENT time: 117928.49125644706  type: 2  entity: 0
aInput()_____
Current Send_Base: 1    Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 117928.49125644706
Recieved ACK for last sent packet. Stopping Timer at
117928.49125644706
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 118144.70656453141  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 118144.70656453141
generateNextArrival(): future time for event 1 at entity 0 will be
118435.79210791347
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2183  payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 118144.70656453141
Packet: 2 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 118144.71
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 118151.00817896056  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2        rcv_end: 9
Packet received is not corrupt. At time 118151.00817896056
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 118156.24765770441  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
```

Expected ACK 2 received
stopTimer: stopping timer at 118156.24765770441
Recieved ACK for last sent packet. Stopping Timer at
118156.24765770441
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 118435.79210791347 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 118435.79210791347
generateNextArrival(): future time for event 1 at entity 0 will be
118633.63750114446
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2204 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 118435.79210791347
Packet: 3 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 118435.79
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 118444.37894833219 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 118444.37894833219
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 118449.11990722375 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 67.0
_____

EVENT time: 118465.79210791347 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 118465.79
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2204 payload:
nnnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 118465.79210791347
Starting timer for packet 3 at time 118465.79210791347

_____

EVENT time: 118475.67537461473 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 118475.67537461473
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 118480.15430158394 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 118480.15430158394
Recieved ACK for last sent packet. Stopping Timer at
118480.15430158394
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 118633.63750114446 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 118633.63750114446
generateNextArrival(): future time for event 1 at entity 0 will be
119023.57860042117
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2225 payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side

startTimer: starting timer at 118633.63750114446
Packet: 4 With Payload: oooooooooooooooooooooo sent to B
Timer started at: 118633.64
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 118635.42085024569 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 118635.42085024569
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message oooooooooooooooooooooo delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 118636.62437818538 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 68.0

_____

EVENT time: 118663.63750114446 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 118663.64
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2225 payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 118663.63750114446
Starting timer for packet 4 at time 118663.63750114446

_____

EVENT time: 118666.590929899 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 118666.590929899
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

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EVENT time: 118672.78789635916 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 118672.78789635916
Recieved ACK for last sent packet. Stopping Timer at
118672.78789635916
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

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EVENT time: 119023.57860042117 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 119023.57860042117
generateNextArrival(): future time for event 1 at entity 0 will be
119204.32142094182
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2246 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 119023.57860042117
Packet: 5 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 119023.58
Packet added to retransmission buffer at index [0]
Next sequence number: 6

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EVENT time: 119026.50071718499 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 119026.50071718499
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

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EVENT time: 119036.48149052402 type: 2 entity: 0

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aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 119036.48149052402
Recieved ACK for last sent packet. Stopping Timer at
119036.48149052402
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 119204.32142094182  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 119204.32142094182
generateNextArrival(): future time for event 1 at entity 0 will be
119237.98944059575
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 119204.32142094182
Packet: 6 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 119204.32
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____


EVENT time: 119211.8411816767  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6       rcv_end: 13
Packet received is not corrupt. At time 119211.8411816767
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 7     rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____


EVENT time: 119216.26737266153  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 119216.26737266153
```

Recieved ACK for last sent packet. Stopping Timer at
119216.26737266153
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 119237.98944059575 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 119237.98944059575
generateNextArrival(): future time for event 1 at entity 0 will be
119527.90307321392
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2288 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 119237.98944059575
Packet: 7 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 119237.99
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 119241.15298928802 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 119241.15298928802
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being lost
In order ACK 7 Sent
_____

EVENT time: 119267.98944059575 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 119267.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2288 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 119267.98944059575

Starting timer for packet 7 at time 119267.98944059575
_____

EVENT time: 119269.49839777828 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 119269.49839777828
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 119278.17148350478 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 119278.17148350478
Recieved ACK for last sent packet. Stopping Timer at
119278.17148350478
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 119527.90307321392 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 119527.90307321392
generateNextArrival(): future time for event 1 at entity 0 will be
119886.16595965455
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2309 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 119527.90307321392
Packet: 8 With Payload: ssssssssssssssssssss sent to B
Timer started at: 119527.90
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 119531.57722708824 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15

Packet received is not corrupt. At time 119531.57722708824
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 119532.69725638602 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 119532.69725638602
Recieved ACK for last sent packet. Stopping Timer at
119532.69725638602
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 119886.16595965455 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 119886.16595965455
generateNextArrival(): future time for event 1 at entity 0 will be
120067.5313577685
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2330 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 119886.16595965455
Packet: 9 With Payload: tttttttttttttttttttt sent to B
Timer started at: 119886.17
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 119888.86037781916 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 119888.86037781916
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 10   rcv_end = 1

toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 119898.65932187873 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 119898.65932187873
Recieved ACK for last sent packet. Stopping Timer at
119898.65932187873
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 120067.5313577685 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120067.5313577685
generateNextArrival(): future time for event 1 at entity 0 will be
120188.66542558064
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2351 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 120067.5313577685
Packet: 10 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 120067.53
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 120072.37311929687 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 120072.37311929687
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 120075.4443800165 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 120075.4443800165
Recieved ACK for last sent packet. Stopping Timer at 120075.4443800165
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 120188.66542558064 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120188.66542558064
generateNextArrival(): future time for event 1 at entity 0 will be
120445.72893459885
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2372 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 120188.66542558064
Packet: 11 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 120188.67
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 120194.74181340986 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 120194.74181340986
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 120199.74892422256 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2

```
Expected ACK 11 received
stopTimer: stopping timer at 120199.74892422256
Recieved ACK for last sent packet. Stopping Timer at
120199.74892422256
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 120445.72893459885  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120445.72893459885
generateNextArrival(): future time for event 1 at entity 0 will be
120602.77718436233
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2393  payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 120445.72893459885
Packet: 12 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 120445.73
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____


EVENT time: 120450.35233619192  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12       rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 120475.72893459885  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 120475.73
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2393  payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
Retransmitting Packet 12
startTimer: starting timer at 120475.72893459885
Starting timer for packet 12 at time 120475.72893459885
_____
```

EVENT time: 120505.72893459885 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 120505.73
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2393 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 120505.72893459885
Starting timer for packet 12 at time 120505.72893459885

_____

EVENT time: 120513.48985259562 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 120513.48985259562
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 120521.1348612934 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 69.0

_____

EVENT time: 120535.72893459885 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 120535.73
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2393 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 120535.72893459885
Starting timer for packet 12 at time 120535.72893459885

_____

EVENT time: 120542.61174352246 type: 2 entity: 1

bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 120542.61174352246
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 120546.22272408217 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 120546.22272408217
Recieved ACK for last sent packet. Stopping Timer at
120546.22272408217
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 120602.77718436233 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120602.77718436233
generateNextArrival(): future time for event 1 at entity 0 will be
120610.05279702142
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2414 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 120602.77718436233
Packet: 13 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 120602.78
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 120606.40079958497 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 120606.40079958497
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:

toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____

EVENT time: 120610.05279702142 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120610.05279702142
generateNextArrival(): future time for event 1 at entity 0 will be
120815.24704733423
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2435 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 120610.05279702142
startTimer: starting timer at 120610.05279702142
Packet: 14 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 120610.05
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 120610.68306527911 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 120612.20172734767 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 120612.20172734767
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 120617.01712088384 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 120617.01712088384
Recieved ACK for last sent packet. Stopping Timer at
120617.01712088384
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 120815.24704733423  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 120815.24704733423
generateNextArrival(): future time for event 1 at entity 0 will be
121034.8582415235
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2456  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 120815.24704733423
Packet: 15 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 120815.25
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____


EVENT time: 120817.02874843594  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15       rcv_end: 6
Packet received is not corrupt. At time 120817.02874843594
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 0     rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 120819.32627338482  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 120819.32627338482
```

Recieved ACK for last sent packet. Stopping Timer at
120819.32627338482
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 121034.8582415235 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 121034.8582415235
generateNextArrival(): future time for event 1 at entity 0 will be
121164.50086977753
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1941 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 121034.8582415235
Packet: 0 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 121034.86
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 121044.19382305369 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 121064.8582415235 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 121064.86
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1941 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 121064.8582415235
Starting timer for packet 0 at time 121064.8582415235
_____

EVENT time: 121071.68584246347 type: 2 entity: 1

bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 121071.68584246347
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____

EVENT time: 121094.8582415235 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 121094.86
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1941 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 121094.8582415235
Starting timer for packet 0 at time 121094.8582415235

_____

EVENT time: 121101.51774651327 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 121101.51774651327
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 121104.53599658194 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 121104.53599658194
Recieved ACK for last sent packet. Stopping Timer at
121104.53599658194
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 121164.50086977753 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 121164.50086977753
generateNextArrival(): future time for event 1 at entity 0 will be
121442.31696523943
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 121164.50086977753
Packet: 1 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 121164.50
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 121167.54631183814 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 121167.54631183814
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 121176.88326670128 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 121176.88326670128
Recieved ACK for last sent packet. Stopping Timer at
121176.88326670128
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 121442.31696523943 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 121442.31696523943
generateNextArrival(): future time for event 1 at entity 0 will be
121811.87170018618
aOutput()_____

Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -1983 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 121442.31696523943
Packet: 2 With Payload: cccccccccccccccccccc sent to B
Timer started at: 121442.32
Packet added to retransmission buffer at index [0]
Next sequence number: 3

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EVENT time: 121443.86849574267 type: 2 entity: 1
bInput() ————————————————————————————
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 121443.86849574267
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

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EVENT time: 121451.78295236062 type: 2 entity: 0
aInput()————————————————————————————
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 121451.78295236062
Recieved ACK for last sent packet. Stopping Timer at
121451.78295236062
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

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EVENT time: 121811.87170018618 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 121811.87170018618
generateNextArrival(): future time for event 1 at entity 0 will be
122004.62660603657
aOutput()————————————————————————————
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2004 payload:

dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 121811.87170018618
Packet: 3 With Payload: dddddddddddddddddddd sent to B
Timer started at: 121811.87
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 121816.78954435867 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 121816.78954435867
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 121825.01519821773 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 121825.01519821773
Recieved ACK for last sent packet. Stopping Timer at
121825.01519821773
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 122004.62660603657 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122004.62660603657
generateNextArrival(): future time for event 1 at entity 0 will be
122019.03134250925
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122004.62660603657
Packet: 4 With Payload: eeeeeeeeeeeeeeeeeeee sent to B

Timer started at: 122004.63
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 122008.62788781397 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 122008.62788781397
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 122017.84673604542 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 70.0

_____

EVENT time: 122019.03134250925 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122019.03134250925
generateNextArrival(): future time for event 1 at entity 0 will be
122112.40577410201
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2046 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 122019.03134250925
startTimer: starting timer at 122019.03134250925
Packet: 5 With Payload: ffffffffffffffffffff sent to B
Timer started at: 122019.03
Packet added to retransmission buffer at index [1]
Next sequence number: 6

_____

EVENT time: 122025.90646076847 type: 2 entity: 1

bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 122025.90646076847
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0   acknum: 5   checksum: -6   payload:
toLayer3: packet being lost
In order ACK 5 Sent

_____

EVENT time: 122049.03134250925 type: 0   entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 122049.03
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4   acknum: 0   checksum: -2025   payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
toLayer3: seqnum: 5   acknum: 0   checksum: -2046   payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 122049.03134250925
Starting timer for packet 5 at time 122049.03134250925

_____

EVENT time: 122055.99133274332 type: 2   entity: 1
bInput() _____
Packet 4 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 122055.99133274332
toLayer3: seqnum: 0   acknum: 5   checksum: -6   payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 122063.31003753777 type: 2   entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 122063.31003753777
toLayer3: seqnum: 0   acknum: 5   checksum: -6   payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 122064.50703451644 type: 2   entity: 0

```
aInput()_____
Current Send_Base: 4    Send_end: 11
Cumulative ACK 5received
stopTimer: stopping timer at 122064.50703451644
Recieved ACK for last sent packet. Stopping Timer at
122064.50703451644
Sliding window 2 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 122073.26032288584  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Received duplicate ACK 5
Send_Base: 6 Send_End: 13
Retransmission Buffer is empty. Ignore Duplicate ACK

_____


EVENT time: 122112.40577410201  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122112.40577410201
generateNextArrival(): future time for event 1 at entity 0 will be
122264.31470686973
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: −2067  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122112.40577410201
Packet: 6 With Payload: gggggggggggggggggggg sent to B
Timer started at: 122112.41
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____


EVENT time: 122115.89617603077  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6      rcv_end: 13
Packet received is not corrupt. At time 122115.89617603077
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 7     rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: −7  payload:
toLayer3: scheduling arrival on other side
```

In order ACK 6 Sent

_____

EVENT time: 122122.98910489213 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 122122.98910489213
Recieved ACK for last sent packet. Stopping Timer at
122122.98910489213
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 122264.31470686973 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122264.31470686973
generateNextArrival(): future time for event 1 at entity 0 will be
122276.24134037294
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2088 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122264.31470686973
Packet: 7 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 122264.31
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 122266.57817316204 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 122266.57817316204
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 122273.48323007906 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 122273.48323007906
Recieved ACK for last sent packet. Stopping Timer at
122273.48323007906
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 122276.24134037294 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122276.24134037294
generateNextArrival(): future time for event 1 at entity 0 will be
122308.27356791895
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2109 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122276.24134037294
Packet: 8 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 122276.24
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 122282.63167210914 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 122282.63167210914
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 122283.6679280984 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received

stopTimer: stopping timer at 122283.6679280984
Recieved ACK for last sent packet. Stopping Timer at 122283.6679280984
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 122308.27356791895 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122308.27356791895
generateNextArrival(): future time for event 1 at entity 0 will be
122579.6685689871
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2130 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122308.27356791895
Packet: 9 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 122308.27
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 122311.9957884457 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 122311.9957884457
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 122320.86828211311 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 122320.86828211311
Recieved ACK for last sent packet. Stopping Timer at
122320.86828211311
Sliding window 1 times
New send_base: 10 send_end: 1

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 122579.6685689871 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122579.6685689871
generateNextArrival(): future time for event 1 at entity 0 will be
122860.57313760796
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 122579.6685689871
Packet: 10 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 122579.67
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 122609.6685689871 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 122609.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: −2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 122609.6685689871
Starting timer for packet 10 at time 122609.6685689871

_____

EVENT time: 122613.10870693075 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 122613.10870693075
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 122621.11764885404 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 71.0

_____

EVENT time: 122639.6685689871 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 122639.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
Retransmitting Packet 10
startTimer: starting timer at 122639.6685689871
Starting timer for packet 10 at time 122639.6685689871

_____

EVENT time: 122669.6685689871 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 122669.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2151 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 122669.6685689871
Starting timer for packet 10 at time 122669.6685689871

_____

EVENT time: 122673.92309335612 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 122673.92309335612
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent

_____

EVENT time: 122683.64403210547 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 122683.64403210547

Recieved ACK for last sent packet. Stopping Timer at
122683.64403210547
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 122860.57313760796 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 122860.57313760796
generateNextArrival(): future time for event 1 at entity 0 will be
123236.71987060152
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 122860.57313760796
Packet: 11 With Payload: lllllllllllllllllll sent to B
Timer started at: 122860.57
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 122868.95974608601 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 122868.95974608601
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 122872.52101199378 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 122872.52101199378
Recieved ACK for last sent packet. Stopping Timer at
122872.52101199378
Sliding window 1 times
New send_base: 12 send_end: 3

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 123236.71987060152 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 123236.71987060152
generateNextArrival(): future time for event 1 at entity 0 will be
123468.11120944853
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −2193 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 123236.71987060152
Packet: 12 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 123236.72
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 123243.18848231452 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 123243.18848231452
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 123248.31864375743 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 123248.31864375743
Recieved ACK for last sent packet. Stopping Timer at
123248.31864375743
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 123468.11120944853 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 123468.11120944853
generateNextArrival(): future time for event 1 at entity 0 will be
123836.98232978302
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2214 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 123468.11120944853
Packet: 13 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 123468.11
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 123469.19690542313 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 123469.19690542313
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 123476.0412610248 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 123476.0412610248
Recieved ACK for last sent packet. Stopping Timer at 123476.0412610248
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 123836.98232978302 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 123836.98232978302
generateNextArrival(): future time for event 1 at entity 0 will be
124202.1668141728

```
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2235  payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 123836.98232978302
Packet: 14 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 123836.98
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 123842.15204321421  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 123842.15204321421
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 15        rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 123845.98495437483  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 123845.98495437483
Recieved ACK for last sent packet. Stopping Timer at
123845.98495437483
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 124202.1668141728  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 124202.1668141728
generateNextArrival(): future time for event 1 at entity 0 will be
124498.85555589465
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
```

toLayer3: seqnum: 15 acknum: 0 checksum: −2256 payload:
pppppppppppppppppppp
toLayer3: packet being lost
startTimer: starting timer at 124202.1668141728
Packet: 15 With Payload: pppppppppppppppppppp sent to B
Timer started at: 124202.17
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 124232.1668141728 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 124232.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: −2256 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 124232.1668141728
Starting timer for packet 15 at time 124232.1668141728
_____

EVENT time: 124235.92419202246 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 124235.92419202246
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 124245.1526535844 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 124245.1526535844
Recieved ACK for last sent packet. Stopping Timer at 124245.1526535844
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 124498.85555589465 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 124498.85555589465
generateNextArrival(): future time for event 1 at entity 0 will be
124530.26520584735
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2261  payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 124498.85555589465
Packet: 0 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 124498.86
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 124502.44923245949  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 124502.44923245949
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____


EVENT time: 124528.85555589465  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 124528.86
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: -2261  payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 124528.85555589465
Starting timer for packet 0 at time 124528.85555589465

_____


EVENT time: 124530.26520584735  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 124530.26520584735
generateNextArrival(): future time for event 1 at entity 0 will be
124809.49736014893
```

```
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2282  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost
stopTimer: stopping timer at 124530.26520584735
startTimer: starting timer at 124530.26520584735
Packet: 1 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 124530.27
Packet added to retransmission buffer at index [1]
Next sequence number: 2

_____


EVENT time: 124535.35493026521  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1       rcv_end: 8
Packet received is not corrupt. At time 124535.35493026521
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____


EVENT time: 124544.91875972778  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Expected ACK 0 received
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 124560.26520584735  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 124560.27
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1  acknum: 0  checksum: -2282  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 124560.26520584735
Starting timer for packet 1 at time 124560.26520584735

_____


EVENT time: 124566.73903622547  type: 2  entity: 1
```

```
bInput() _____
Packet 1 received. rcv_base: 1        rcv_end: 8
Packet received is not corrupt. At time 124566.73903622547
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 2        rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____


EVENT time: 124570.62660603656  type: 2  entity: 0
aInput()_____
Current Send_Base: 1    Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 124570.62660603656
Recieved ACK for last sent packet. Stopping Timer at
124570.62660603656
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 124809.49736014893  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 124809.49736014893
generateNextArrival(): future time for event 1 at entity 0 will be
125182.10394604328
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -2303  payload:
sssssssssssssssssss
toLayer3: packet being lost
startTimer: starting timer at 124809.49736014893
Packet: 2 With Payload: sssssssssssssssssss sent to B
Timer started at: 124809.50
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____


EVENT time: 124839.49736014893  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 124839.50
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2303  payload:
```

sssssssssssssssssss
toLayer3: packet being lost
Retransmitting Packet 2
startTimer: starting timer at 124839.49736014893
Starting timer for packet 2 at time 124839.49736014893

_____

EVENT time: 124869.49736014893 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 124869.50
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2303 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 124869.49736014893
Starting timer for packet 2 at time 124869.49736014893

_____

EVENT time: 124873.15338602863 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 124873.15338602863
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 124879.38578447829 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 124879.38578447829
Recieved ACK for last sent packet. Stopping Timer at
124879.38578447829
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 125182.10394604328 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125182.10394604328

generateNextArrival(): future time for event 1 at entity 0 will be
125221.04556413465
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2324 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 125182.10394604328
Packet: 3 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 125182.10
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 125186.90313425093 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 125186.90313425093
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 125212.10394604328 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 125212.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2324 payload:
ttttttttttttttttttttt
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 125212.10394604328
Starting timer for packet 3 at time 125212.10394604328

_____

EVENT time: 125217.4096194342 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 4   rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 125221.04556413465 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125221.04556413465
generateNextArrival(): future time for event 1 at entity 0 will be
125317.72820215461
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 125221.04556413465
startTimer: starting timer at 125221.04556413465
Packet: 4 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 125221.05
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____

EVENT time: 125225.78377636036 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 125225.78377636036
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 125234.72905667286 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Cumulative ACK 4received
stopTimer: stopping timer at 125234.72905667286
Recieved ACK for last sent packet. Stopping Timer at
125234.72905667286
Sliding window 2 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 125317.72820215461 type: 1 entity: 0
generateNextArrival(): called

```
generateNextArrival(): time is 125317.72820215461
generateNextArrival(): future time for event 1 at entity 0 will be
125508.61537522508
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2366  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: packet being lost
startTimer: starting timer at 125317.72820215461
Packet: 5 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 125317.73
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____


EVENT time: 125347.72820215461  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 125347.73
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2366  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 125347.72820215461
Starting timer for packet 5 at time 125347.72820215461
_____


EVENT time: 125349.41761528367  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5        rcv_end: 12
Packet received is not corrupt. At time 125349.41761528367
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____


EVENT time: 125352.51002533037  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 125352.51002533037
Recieved ACK for last sent packet. Stopping Timer at
```

125352.51002533037
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 125508.61537522508 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125508.61537522508
generateNextArrival(): future time for event 1 at entity 0 will be
125845.12466811122
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2387 payload:
wwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 125508.61537522508
Packet: 6 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 125508.62
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 125515.48033082065 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 125515.48033082065
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 125518.68755149998 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 125518.68755149998
Recieved ACK for last sent packet. Stopping Timer at
125518.68755149998
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 125845.12466811122 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125845.12466811122
generateNextArrival(): future time for event 1 at entity 0 will be
125889.71831415755
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2408 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 125845.12466811122
Packet: 7 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 125845.12
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 125854.91207617421 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 125854.91207617421
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being lost
In order ACK 7 Sent

_____

EVENT time: 125875.12466811122 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 125875.12
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2408 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 125875.12466811122
Starting timer for packet 7 at time 125875.12466811122

_____

EVENT time: 125878.64528336437 type: 2 entity: 1

```
bInput() _____
Packet 7 received. rcv_base: 8        rcv_end: 15
Packet received is not corrupt. At time 125878.64528336437
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____


EVENT time: 125884.07867671744  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 125884.07867671744
Recieved ACK for last sent packet. Stopping Timer at
125884.07867671744
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 125889.71831415755  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125889.71831415755
generateNextArrival(): future time for event 1 at entity 0 will be
125973.79070406203
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2429  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 125889.71831415755
Packet: 8 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 125889.72
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 125898.63750114446  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8        rcv_end: 15
Packet received is not corrupt. At time 125898.63750114446
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 125906.35062715539 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 125906.35062715539
Recieved ACK for last sent packet. Stopping Timer at
125906.35062715539
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 125973.79070406203 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 125973.79070406203
generateNextArrival(): future time for event 1 at entity 0 will be
126068.75209814755
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2450 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 125973.79070406203
Packet: 9 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 125973.79
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 125976.84081545459 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 125976.84081545459
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 125985.96600238046 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 125985.96600238046
Recieved ACK for last sent packet. Stopping Timer at
125985.96600238046
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 126068.75209814755 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 126068.75209814755
generateNextArrival(): future time for event 1 at entity 0 will be
126195.78234199045
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being lost
startTimer: starting timer at 126068.75209814755
Packet: 10 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 126068.75
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 126098.75209814755 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 126098.75
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 126098.75209814755
Starting timer for packet 10 at time 126098.75209814755
_____

EVENT time: 126103.11841181679 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1

Packet received is not corrupt. At time 126103.11841181679
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 126106.27454451127 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 126106.27454451127
Recieved ACK for last sent packet. Stopping Timer at
126106.27454451127
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 126195.78234199045 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 126195.78234199045
generateNextArrival(): future time for event 1 at entity 0 will be
126317.57560960726
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 126195.78234199045
Packet: 11 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 126195.78
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 126196.86226996676 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 126196.86226996676
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 12   rcv_end = 3

toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent
_____

EVENT time: 126205.28019043553 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 126205.28019043553
Recieved ACK for last sent packet. Stopping Timer at
126205.28019043553
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 126317.57560960726 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 126317.57560960726
generateNextArrival(): future time for event 1 at entity 0 will be
126715.51255836668
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 126317.57560960726
Packet: 12 With Payload: cccccccccccccccccccc sent to B
Timer started at: 126317.58
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 126319.92641987368 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 126347.57560960726 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 126347.58

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 126347.57560960726
Starting timer for packet 12 at time 126347.57560960726
_____

EVENT time: 126349.65697195352 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 126377.57560960726 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 126377.58
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 126377.57560960726
Starting timer for packet 12 at time 126377.57560960726
_____

EVENT time: 126380.83639027074 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 126380.83639027074
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 126385.03405865662 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 126385.03405865662
Recieved ACK for last sent packet. Stopping Timer at

126385.03405865662
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 126715.51255836668 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 126715.51255836668
generateNextArrival(): future time for event 1 at entity 0 will be
126945.32914212473
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2014 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 126715.51255836668
Packet: 13 With Payload: dddddddddddddddddddd sent to B
Timer started at: 126715.51
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 126723.6904202399 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 126723.6904202399
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 126730.08487197488 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 126730.08487197488
Recieved ACK for last sent packet. Stopping Timer at
126730.08487197488
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 126945.32914212473 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 126945.32914212473
generateNextArrival(): future time for event 1 at entity 0 will be
127070.01556443986
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 126945.32914212473
Packet: 14 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 126945.33
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 126949.16617328413 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 126949.16617328413
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: −15 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 126958.73055207987 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Received Corrupted ACK
Number of Corruped Packets to A: 72.0

_____

EVENT time: 126975.32914212473 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 126975.33
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: −2035 payload:

eeeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 126975.32914212473
Starting timer for packet 14 at time 126975.32914212473

_____

EVENT time: 126983.04638813443 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 126983.04638813443
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 127005.32914212473 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127005.33
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 127005.32914212473
Starting timer for packet 14 at time 127005.32914212473

_____

EVENT time: 127010.23847163307 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 127010.23847163307
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 127013.22431104467 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 127013.22431104467
Recieved ACK for last sent packet. Stopping Timer at
127013.22431104467
Sliding window 1 times
New send_base: 15 send_end: 6

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 127070.01556443986 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127070.01556443986
generateNextArrival(): future time for event 1 at entity 0 will be
127260.85390789517
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2056 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 127070.01556443986
Packet: 15 With Payload: ffffffffffffffffffff sent to B
Timer started at: 127070.02
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 127075.43687246318 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 127075.43687246318
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 127078.70177312543 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 127078.70177312543
Recieved ACK for last sent packet. Stopping Timer at
127078.70177312543
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 127260.85390789517 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127260.85390789517
generateNextArrival(): future time for event 1 at entity 0 will be
127552.28125858336
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 127260.85390789517
Packet: 0 With Payload: gggggggggggggggggggg sent to B
Timer started at: 127260.85
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 127268.81862849822 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 127290.85390789517 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127290.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 127290.85390789517
Starting timer for packet 0 at time 127290.85390789517

_____

EVENT time: 127293.47828608054 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 127320.85390789517 type: 0 entity: 0

aTimerInterrup()_____

TIMEOUT!!! at: 127320.85

Retransmitting every packet since last ACK'd

toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
ggggggggggggggggggggg

toLayer3: scheduling arrival on other side

Retransmitting Packet 0

startTimer: starting timer at 127320.85390789517

Starting timer for packet 0 at time 127320.85390789517

_____

EVENT time: 127326.80614642784 type: 2 entity: 1

bInput() _____

Packet 0 received. rcv_base: 0   rcv_end: 7

Packet received is not corrupt. At time 127326.80614642784

Packet received is in order. Delivering packet(s) to layer5

Packet 0 Message ggggggggggggggggggggg delivered to Layer 5

New rcv_base = 1   rcv_end = 8

toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:

toLayer3: packet being corrupted

toLayer3: scheduling arrival on other side

In order ACK 0 Sent

_____

EVENT time: 127329.21848200937 type: 2 entity: 0

aInput()_____

Current Send_Base: 0   Send_end: 7

Received Corrupted ACK

Number of Corruped Packets to A: 73.0

_____

EVENT time: 127350.85390789517 type: 0 entity: 0

aTimerInterrup()_____

TIMEOUT!!! at: 127350.85

Retransmitting every packet since last ACK'd

toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
ggggggggggggggggggggg

toLayer3: packet being corrupted

toLayer3: scheduling arrival on other side

Retransmitting Packet 0

startTimer: starting timer at 127350.85390789517

Starting timer for packet 0 at time 127350.85390789517

_____

EVENT time: 127360.38010803556 type: 2 entity: 1

bInput() _____

Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 127380.85390789517 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127380.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 127380.85390789517
Starting timer for packet 0 at time 127380.85390789517

_____

EVENT time: 127390.50535599845 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 127390.50535599845
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 127398.07126071966 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 127398.07126071966
Recieved ACK for last sent packet. Stopping Timer at
127398.07126071966
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 127552.28125858336 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127552.28125858336
generateNextArrival(): future time for event 1 at entity 0 will be
127601.96539201029
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window

toLayer3: seqnum: 1 acknum: 0 checksum: −2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 127552.28125858336
Packet: 1 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 127552.28
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 127556.93377483447 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 127556.93377483447
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: −2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 127565.06137272259 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 74.0

_____

EVENT time: 127582.28125858336 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127582.28
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: −2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 127582.28125858336
Starting timer for packet 1 at time 127582.28125858336

_____

EVENT time: 127590.37424848173 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 127590.37424848173

toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK1 Sent
_____

EVENT time: 127601.96539201029 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127601.96539201029
generateNextArrival(): future time for event 1 at entity 0 will be
127835.73717459642
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2103 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 127601.96539201029
startTimer: starting timer at 127601.96539201029
Packet: 2 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 127601.97
Packet added to retransmission buffer at index [1]
Next sequence number: 3

_____

EVENT time: 127606.37784966585 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 127606.37784966585
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 127614.31180761135 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 75.0

_____

EVENT time: 127631.96539201029 type: 0 entity: 0

aTimerInterrup()_____
TIMEOUT!!! at: 127631.97
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: −2082 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
toLayer3: seqnum: 2 acknum: 0 checksum: −2103 payload:
iiiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 127631.96539201029
Starting timer for packet 2 at time 127631.96539201029
_____

EVENT time: 127638.45158238475 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 127638.45158238475
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 127639.57518234813 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 127639.57518234813
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 127644.51506088446 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Cumulative ACK 2received
stopTimer: stopping timer at 127644.51506088446
Recieved ACK for last sent packet. Stopping Timer at
127644.51506088446
Sliding window 2 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 127652.40232551045 type: 2 entity: 0

aInput()_____
Current Send_Base: 3   Send_end: 10
Received duplicate ACK 2
Send_Base: 3 Send_End: 10
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 127835.73717459642 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127835.73717459642
generateNextArrival(): future time for event 1 at entity 0 will be
127908.46888637962
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 127835.73717459642
Packet: 3 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 127835.74
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 127839.87826166573 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 127839.87826166573
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 127843.30439161354 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 76.0

_____

EVENT time: 127865.73717459642 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127865.74
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 127865.73717459642
Starting timer for packet 3 at time 127865.73717459642

_____

EVENT time: 127872.18079165016 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 127872.18079165016
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 127895.73717459642 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127895.74
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 127895.73717459642
Starting timer for packet 3 at time 127895.73717459642

_____

EVENT time: 127898.67659535511 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 127898.67659535511
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 127900.63380840482 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received

stopTimer: stopping timer at 127900.63380840482
Recieved ACK for last sent packet. Stopping Timer at
127900.63380840482
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 127908.46888637962 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127908.46888637962
generateNextArrival(): future time for event 1 at entity 0 will be
127959.91088595235
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 127908.46888637962
Packet: 4 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 127908.47
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 127912.33256019778 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 127912.33256019778
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____

EVENT time: 127913.94753868223 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 127913.94753868223
Recieved ACK for last sent packet. Stopping Timer at
127913.94753868223
Sliding window 1 times

New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 127959.91088595235 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 127959.91088595235
generateNextArrival(): future time for event 1 at entity 0 will be
128265.09598071233
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2166 payload:
lllllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 127959.91088595235
Packet: 5 With Payload: lllllllllllllllllll sent to B
Timer started at: 127959.91
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 127989.91088595235 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 127989.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2166 payload:
lllllllllllllllllll
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 127989.91088595235
Starting timer for packet 5 at time 127989.91088595235

_____

EVENT time: 128019.91088595235 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128019.91
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2166 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 128019.91088595235
Starting timer for packet 5 at time 128019.91088595235

_____

EVENT time: 128024.94573809017 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 128024.94573809017
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 128030.78151799068 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 128030.78151799068
Recieved ACK for last sent packet. Stopping Timer at
128030.78151799068
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 128265.09598071233 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128265.09598071233
generateNextArrival(): future time for event 1 at entity 0 will be
128338.20612201303
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 128265.09598071233
Packet: 6 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 128265.10
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 128269.0269478439 type: 2 entity: 1
bInput() _____

Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 128295.09598071233 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128295.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2187 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 128295.09598071233
Starting timer for packet 6 at time 128295.09598071233

_____

EVENT time: 128300.60133671074 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 128300.60133671074
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: packet being lost
In order ACK 6 Sent

_____

EVENT time: 128325.09598071233 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128325.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2187 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 128325.09598071233
Starting timer for packet 6 at time 128325.09598071233

_____

EVENT time: 128331.27838984347 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 128331.27838984347
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side

Packet received is outside of window. ACK6 Sent
_____

EVENT time: 128334.75945310835 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 128334.75945310835
Recieved ACK for last sent packet. Stopping Timer at
128334.75945310835
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 128338.20612201303 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128338.20612201303
generateNextArrival(): future time for event 1 at entity 0 will be
128346.59260841704
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2208 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 128338.20612201303
Packet: 7 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 128338.21
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 128346.15930661949 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 128346.15930661949
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

```
EVENT time: 128346.59260841704  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128346.59260841704
generateNextArrival(): future time for event 1 at entity 0 will be
128351.2070070498
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2229  payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 128346.59260841704
startTimer: starting timer at 128346.59260841704
Packet: 8 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 128346.59
Packet added to retransmission buffer at index [1]
Next sequence number: 9

_____


EVENT time: 128351.2070070498  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128351.2070070498
generateNextArrival(): future time for event 1 at entity 0 will be
128574.0897854549
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2250  payload:
pppppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 128351.2070070498
startTimer: starting timer at 128351.2070070498
Packet: 9 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 128351.21
Packet added to retransmission buffer at index [2]
Next sequence number: 10

_____


EVENT time: 128354.32892849516  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
```

_____

EVENT time: 128355.14236884673 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 128355.14236884673
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 128362.64400158699 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 128364.7042756432 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 128381.2070070498 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128381.21
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: −2250 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 128381.2070070498
Starting timer for packet 9 at time 128381.2070070498

_____

EVENT time: 128386.89391766109 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 128386.89391766109

Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 128392.21222571492 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 128392.21222571492
Recieved ACK for last sent packet. Stopping Timer at
128392.21222571492
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 128574.0897854549 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128574.0897854549
generateNextArrival(): future time for event 1 at entity 0 will be
128755.83361308636
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 128574.0897854549
Packet: 10 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 128574.09
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 128604.0897854549 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128604.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 10

startTimer: starting timer at 128604.0897854549
Starting timer for packet 10 at time 128604.0897854549
_____

EVENT time: 128613.20096438492 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 128613.20096438492
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: –11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 128620.19721060825 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 128620.19721060825
Recieved ACK for last sent packet. Stopping Timer at
128620.19721060825
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 128755.83361308636 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128755.83361308636
generateNextArrival(): future time for event 1 at entity 0 will be
128951.42063661614
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: –2292 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 128755.83361308636
Packet: 11 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 128755.83
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

```
EVENT time: 128757.1129490036  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11        rcv_end: 2
Packet received is not corrupt. At time 128757.1129490036
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 12       rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: packet being lost
In order ACK 11 Sent

_____


EVENT time: 128785.83361308636  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 128785.83
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11  acknum: 0  checksum: -2292  payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 128785.83361308636
Starting timer for packet 11 at time 128785.83361308636

_____


EVENT time: 128787.85619678337  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 128787.85619678337
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____


EVENT time: 128790.37098300121  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 128790.37098300121
Recieved ACK for last sent packet. Stopping Timer at
128790.37098300121
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____
```

EVENT time: 128951.42063661614 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 128951.42063661614
generateNextArrival(): future time for event 1 at entity 0 will be
129033.32010864593
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2313 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 128951.42063661614
Packet: 12 With Payload: sssssssssssssssssssss sent to B
Timer started at: 128951.42
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 128958.3809015168 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 128958.3809015168
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 128966.13083285015 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 128966.13083285015
Recieved ACK for last sent packet. Stopping Timer at
128966.13083285015
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 129033.32010864593 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 129033.32010864593
generateNextArrival(): future time for event 1 at entity 0 will be

129404.98672444842
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 129033.32010864593
Packet: 13 With Payload: tttttttttttttttttttt sent to B
Timer started at: 129033.32
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 129034.91009247112 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 129034.91009247112
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 129043.83312479022 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 129043.83312479022
Recieved ACK for last sent packet. Stopping Timer at
129043.83312479022
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 129404.98672444842 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 129404.98672444842
generateNextArrival(): future time for event 1 at entity 0 will be
129681.8140202033
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14

NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 129404.98672444842
Packet: 14 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 129404.99
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 129414.88592181163 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 129434.98672444842 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 129434.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 129434.98672444842
Starting timer for packet 14 at time 129434.98672444842

_____

EVENT time: 129439.81859797971 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 129439.81859797971
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 129446.6195562609 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received

stopTimer: stopping timer at 129446.6195562609
Recieved ACK for last sent packet. Stopping Timer at 129446.6195562609
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 129681.8140202033 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 129681.8140202033
generateNextArrival(): future time for event 1 at entity 0 will be
129913.36405529958
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −2376 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 129681.8140202033
Packet: 15 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 129681.81
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 129688.24967192607 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 129688.24967192607
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: −16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 129689.52076784574 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 129689.52076784574
Recieved ACK for last sent packet. Stopping Timer at
129689.52076784574
Sliding window 1 times
New send_base: 0 send_end: 7

Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 129913.36405529958 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 129913.36405529958
generateNextArrival(): future time for event 1 at entity 0 will be
130192.63283181253
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2381 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 129913.36405529958
Packet: 0 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 129913.36
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 129920.90990936007 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 129920.90990936007
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 129929.29624317153 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 129929.29624317153
Recieved ACK for last sent packet. Stopping Timer at
129929.29624317153
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 130192.63283181253 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130192.63283181253
generateNextArrival(): future time for event 1 at entity 0 will be
130195.9654530473
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 130192.63283181253
Packet: 1 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 130192.63
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 130195.9654530473 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130195.9654530473
generateNextArrival(): future time for event 1 at entity 0 will be
130197.40592669457
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 130195.9654530473
startTimer: starting timer at 130195.9654530473
Packet: 2 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 130195.97
Packet added to retransmission buffer at index [1]
Next sequence number: 3
_____

EVENT time: 130197.40592669457 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130197.40592669457
generateNextArrival(): future time for event 1 at entity 0 will be
130545.82964568013
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 3
NextSeqNo is in send window

toLayer3: seqnum: 3 acknum: 0 checksum: –2444 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 130197.40592669457
startTimer: starting timer at 130197.40592669457
Packet: 3 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 130197.41
Packet added to retransmission buffer at index [2]
Next sequence number: 4
_____

EVENT time: 130200.53520310072 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 130200.53520310072
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: –2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 130204.01956236461 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 130207.05490279858 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 130207.05490279858
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: –3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 130208.20899075293 type: 2 entity: 1
bInput() _____

Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 130208.20899075293
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 130214.73699148538 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 130220.36841944643 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 77.0

_____

EVENT time: 130227.40592669457 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 130227.41
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2444 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 130227.40592669457
Starting timer for packet 3 at time 130227.40592669457

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EVENT time: 130234.2156743065 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 130234.2156743065
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

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EVENT time: 130237.88900418107 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 130237.88900418107
Recieved ACK for last sent packet. Stopping Timer at
130237.88900418107
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

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EVENT time: 130545.82964568013 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130545.82964568013
generateNextArrival(): future time for event 1 at entity 0 will be
130697.8118228706
aOutput()——————————————————————————
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 130545.82964568013
Packet: 4 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 130545.83
Packet added to retransmission buffer at index [0]
Next sequence number: 5

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EVENT time: 130553.03491317487 type: 2 entity: 1
bInput() ——————————————————————————
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 130553.03491317487
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 130557.23175756099 type: 2 entity: 0

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aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 130557.23175756099
Recieved ACK for last sent packet. Stopping Timer at
130557.23175756099
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 130697.8118228706  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130697.8118228706
generateNextArrival(): future time for event 1 at entity 0 will be
130952.7390362255
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -1966  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 130697.8118228706
Packet: 5 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 130697.81
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____


EVENT time: 130704.3048799097  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5       rcv_end: 12
Packet received is not corrupt. At time 130704.3048799097
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 6     rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____


EVENT time: 130709.60203863647  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 130709.60203863647
```

Recieved ACK for last sent packet. Stopping Timer at
130709.60203863647
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 130952.7390362255 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 130952.7390362255
generateNextArrival(): future time for event 1 at entity 0 will be
131152.52540665917
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1987 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 130952.7390362255
Packet: 6 With Payload: cccccccccccccccccccc sent to B
Timer started at: 130952.74
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 130960.42030091253 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 130960.42030091253
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 130966.85512863555 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 130966.85512863555
Recieved ACK for last sent packet. Stopping Timer at
130966.85512863555
Sliding window 1 times
New send_base: 7 send_end: 14

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 131152.52540665917 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131152.52540665917
generateNextArrival(): future time for event 1 at entity 0 will be
131281.8018127995
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131152.52540665917
Packet: 7 With Payload: dddddddddddddddddddd sent to B
Timer started at: 131152.53
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 131161.85302285838 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 131161.85302285838
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 131169.15991698968 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 131169.15991698968
Recieved ACK for last sent packet. Stopping Timer at
131169.15991698968
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 131281.8018127995 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131281.8018127995
generateNextArrival(): future time for event 1 at entity 0 will be
131361.85796685694
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131281.8018127995
Packet: 8 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 131281.80
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 131288.59892574852 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 131288.59892574852
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 131297.75157933292 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 131297.75157933292
Recieved ACK for last sent packet. Stopping Timer at
131297.75157933292
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131361.85796685694 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131361.85796685694
generateNextArrival(): future time for event 1 at entity 0 will be

131361.99224829863
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131361.85796685694
Packet: 9 With Payload: ffffffffffffffffffff sent to B
Timer started at: 131361.86
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 131361.99224829863 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131361.99224829863
generateNextArrival(): future time for event 1 at entity 0 will be
131519.08932767727
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2071 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 131361.99224829863
startTimer: starting timer at 131361.99224829863
Packet: 10 With Payload: gggggggggggggggggggg sent to B
Timer started at: 131361.99
Packet added to retransmission buffer at index [1]
Next sequence number: 11

_____

EVENT time: 131367.7300027467 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 131367.7300027467
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 131372.06308175914 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 131372.06308175914
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 131372.48112430194 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131377.59343241682 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 131377.59343241682
Recieved ACK for last sent packet. Stopping Timer at
131377.59343241682
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131519.08932767727 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131519.08932767727
generateNextArrival(): future time for event 1 at entity 0 will be
131711.09958189644
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2092 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131519.08932767727
Packet: 11 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B

```
Timer started at: 131519.09
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 131521.5686819056  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11      rcv_end: 2
Packet received is not corrupt. At time 131521.5686819056
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 12      rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 131525.78063295392  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 131525.78063295392
Recieved ACK for last sent packet. Stopping Timer at
131525.78063295392
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131711.09958189644  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131711.09958189644
generateNextArrival(): future time for event 1 at entity 0 will be
131753.2273323771
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2113  payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131711.09958189644
Packet: 12 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 131711.10
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____
```

EVENT time: 131713.56135746333 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 131713.56135746333
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 131720.3296304209 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 131720.3296304209
Recieved ACK for last sent packet. Stopping Timer at 131720.3296304209
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131753.2273323771 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131753.2273323771
generateNextArrival(): future time for event 1 at entity 0 will be
131890.89022492143
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131753.2273323771
Packet: 13 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 131753.23
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 131761.54719687492 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4

Packet received is not corrupt. At time 131761.54719687492
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message jjjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 131783.2273323771 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 131783.23
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjjjj
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 131783.2273323771
Starting timer for packet 13 at time 131783.2273323771

_____

EVENT time: 131789.90469069494 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 131813.2273323771 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 131813.23
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 131813.2273323771
Starting timer for packet 13 at time 131813.2273323771

_____

EVENT time: 131819.52867213968 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 131819.52867213968
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side

Packet received is outside of window. ACK13 Sent
_____

EVENT time: 131826.37549974062 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 131826.37549974062
Recieved ACK for last sent packet. Stopping Timer at
131826.37549974062
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131890.89022492143 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131890.89022492143
generateNextArrival(): future time for event 1 at entity 0 will be
131932.92031617177
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2155 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131890.89022492143
Packet: 14 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 131890.89
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 131896.0475783563 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 131920.89022492143 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 131920.89
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2155 payload:

kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 131920.89022492143
Starting timer for packet 14 at time 131920.89022492143

_____

EVENT time: 131922.3346354564 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 131922.3346354564
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: −15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 131926.52516251107 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 131926.52516251107
Recieved ACK for last sent packet. Stopping Timer at
131926.52516251107
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 131932.92031617177 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 131932.92031617177
generateNextArrival(): future time for event 1 at entity 0 will be
132061.6718039491
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −2176 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 131932.92031617177
Packet: 15 With Payload: llllllllllllllllllll sent to B
Timer started at: 131932.92
Packet added to retransmission buffer at index [0]

Next sequence number: 0
_____

EVENT time: 131936.65764336073 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 131936.65764336073
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 131943.13531907104 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 131943.13531907104
Recieved ACK for last sent packet. Stopping Timer at
131943.13531907104
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 132061.6718039491 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 132061.6718039491
generateNextArrival(): future time for event 1 at entity 0 will be
132297.25028229624
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2181 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 132061.6718039491
Packet: 0 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 132061.67
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 132065.07348857084 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 132065.07348857084
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message mmmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 132073.4804223762 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 132073.4804223762
Recieved ACK for last sent packet. Stopping Timer at 132073.4804223762
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 132297.25028229624 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 132297.25028229624
generateNextArrival(): future time for event 1 at entity 0 will be
132600.8117923521
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2202 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 132297.25028229624
Packet: 1 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 132297.25
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 132305.4127628407 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 132305.4127628407
Packet received is in order. Delivering packet(s) to layer5

Packet 1 Message nnnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being lost
In order ACK 1 Sent

_____

EVENT time: 132327.25028229624 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 132327.25
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2202 payload:
nnnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 132327.25028229624
Starting timer for packet 1 at time 132327.25028229624

_____

EVENT time: 132329.30884731593 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 132329.30884731593
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 132332.43284401993 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 132332.43284401993
Recieved ACK for last sent packet. Stopping Timer at
132332.43284401993
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 132600.8117923521 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 132600.8117923521
generateNextArrival(): future time for event 1 at entity 0 will be
132989.66643269145
aOutput()_____

Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:
oooooooooooooooooooo
toLayer3: packet being lost
startTimer: starting timer at 132600.8117923521
Packet: 2 With Payload: oooooooooooooooooooo sent to B
Timer started at: 132600.81
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 132630.8117923521 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 132630.81
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 132630.8117923521
Starting timer for packet 2 at time 132630.8117923521
_____

EVENT time: 132634.75374614706 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 132634.75374614706
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 132640.84798730433 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 132640.84798730433
Recieved ACK for last sent packet. Stopping Timer at
132640.84798730433
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

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EVENT time: 132989.66643269145 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 132989.66643269145
generateNextArrival(): future time for event 1 at entity 0 will be
133177.9168065432
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 132989.66643269145
Packet: 3 With Payload: pppppppppppppppppppp sent to B
Timer started at: 132989.67
Packet added to retransmission buffer at index [0]
Next sequence number: 4

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EVENT time: 132992.2446668905 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is corrupted. Discarding and ignoring packet

————————————————————

EVENT time: 133019.66643269145 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 133019.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 133019.66643269145
Starting timer for packet 3 at time 133019.66643269145

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EVENT time: 133023.1032746361 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 133023.1032746361
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message pppppppppppppppppppp delivered to Layer 5

New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 133028.8604998932 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 133028.8604998932
Recieved ACK for last sent packet. Stopping Timer at 133028.8604998932
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 133177.9168065432 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 133177.9168065432
generateNextArrival(): future time for event 1 at entity 0 will be
133258.08282723473
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2265 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 133177.9168065432
Packet: 4 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 133177.92
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 133179.30710776086 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 133179.30710776086
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 133186.66069521164 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 133186.66069521164
Recieved ACK for last sent packet. Stopping Timer at
133186.66069521164
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 133258.08282723473 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 133258.08282723473
generateNextArrival(): future time for event 1 at entity 0 will be
133453.5477767266
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2286 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 133258.08282723473
Packet: 5 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 133258.08
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 133260.32349620046 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 133260.32349620046
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 133270.10348826565 type: 2 entity: 0
aInput()_____

Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 133270.10348826565
Recieved ACK for last sent packet. Stopping Timer at
133270.10348826565
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 133453.5477767266 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 133453.5477767266
generateNextArrival(): future time for event 1 at entity 0 will be
133710.42817468796
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2307 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 133453.5477767266
Packet: 6 With Payload: ssssssssssssssssssss sent to B
Timer started at: 133453.55
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 133458.661732841 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 133458.661732841
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

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EVENT time: 133460.4645832698 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 133460.4645832698
Recieved ACK for last sent packet. Stopping Timer at 133460.4645832698

Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 133710.42817468796 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 133710.42817468796
generateNextArrival(): future time for event 1 at entity 0 will be
134099.13632618185
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
tttttttttttttttttttt
toLayer3: packet being lost
startTimer: starting timer at 133710.42817468796
Packet: 7 With Payload: tttttttttttttttttttt sent to B
Timer started at: 133710.43
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 133740.42817468796 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 133740.43
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 133740.42817468796
Starting timer for packet 7 at time 133740.42817468796

_____

EVENT time: 133742.74602496414 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 133742.74602496414
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 133747.72704245124 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 133747.72704245124
Recieved ACK for last sent packet. Stopping Timer at
133747.72704245124
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 134099.13632618185 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 134099.13632618185
generateNextArrival(): future time for event 1 at entity 0 will be
134441.9812616352
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 134099.13632618185
Packet: 8 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 134099.14
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 134104.1442609943 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 134104.1442609943
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 134109.87292092654 type: 2 entity: 0
aInput()_____

Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 134109.87292092654
Recieved ACK for last sent packet. Stopping Timer at
134109.87292092654
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 134441.9812616352 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 134441.9812616352
generateNextArrival(): future time for event 1 at entity 0 will be
134737.974181341
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2370 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 134441.9812616352
Packet: 9 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 134441.98
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 134449.32303842282 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 134449.32303842282
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 134451.70763267923 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 134451.70763267923
Recieved ACK for last sent packet. Stopping Timer at

134451.70763267923
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 134737.974181341 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 134737.974181341
generateNextArrival(): future time for event 1 at entity 0 will be
135042.95175023653
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2391 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 134737.974181341
Packet: 10 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 134737.97
Packet added to retransmission buffer at index [0]
Next sequence number: 11

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EVENT time: 134745.0665608692 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 134745.0665608692
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

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EVENT time: 134754.07666249582 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 134754.07666249582
Recieved ACK for last sent packet. Stopping Timer at
134754.07666249582
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 135042.95175023653 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135042.95175023653
generateNextArrival(): future time for event 1 at entity 0 will be
135191.52806176947
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2412 payload:
xxxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135042.95175023653
Packet: 11 With Payload: xxxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 135042.95
Packet added to retransmission buffer at index [0]
Next sequence number: 12

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EVENT time: 135046.75664540546 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 135046.75664540546
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

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EVENT time: 135052.10132145148 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 135052.10132145148
Recieved ACK for last sent packet. Stopping Timer at
135052.10132145148
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

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EVENT time: 135191.52806176947 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 135191.52806176947
generateNextArrival(): future time for event 1 at entity 0 will be
135312.56447035127
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2433  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135191.52806176947
Packet: 12 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 135191.53
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 135194.38178655354  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is not corrupt. At time 135194.38178655354
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 13     rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____


EVENT time: 135221.52806176947  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 135221.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2433  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being lost
Retransmitting Packet 12
startTimer: starting timer at 135221.52806176947
Starting timer for packet 12 at time 135221.52806176947

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EVENT time: 135251.52806176947  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 135251.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2433  payload:
```

yyyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 135251.52806176947
Starting timer for packet 12 at time 135251.52806176947

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EVENT time: 135256.33191930907 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 135281.52806176947 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 135281.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 135281.52806176947
Starting timer for packet 12 at time 135281.52806176947

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EVENT time: 135286.61537522508 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 135286.61537522508
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

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EVENT time: 135289.55534531694 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 78.0

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EVENT time: 135311.52806176947 type: 0 entity: 0
aTimerInterrup()_____

TIMEOUT!!! at: 135311.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: −2433 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: packet being lost
Retransmitting Packet 12
startTimer: starting timer at 135311.52806176947
Starting timer for packet 12 at time 135311.52806176947

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EVENT time: 135312.56447035127 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135312.56447035127
generateNextArrival(): future time for event 1 at entity 0 will be
135495.3459273049
aOutput()————————————————————————————
Send_Base: 12 Send_end: 3
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2454 payload:
zzzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 135312.56447035127
startTimer: starting timer at 135312.56447035127
Packet: 13 With Payload: zzzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 135312.56
Packet added to retransmission buffer at index [1]
Next sequence number: 14

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EVENT time: 135320.56022827845 type: 2 entity: 1
bInput() ————————————————————————————
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 135320.56022827845
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message zzzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

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EVENT time: 135322.40208136235 type: 2 entity: 0
aInput()————————————————————————————
Current Send_Base: 12   Send_end: 3
Cumulative ACK 13received
stopTimer: stopping timer at 135322.40208136235

Recieved ACK for last sent packet. Stopping Timer at
135322.40208136235
Sliding window 2 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 135495.3459273049 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135495.3459273049
generateNextArrival(): future time for event 1 at entity 0 will be
135513.44950712606
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1955 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135495.3459273049
Packet: 14 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 135495.35
Packet added to retransmission buffer at index [0]
Next sequence number: 15

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EVENT time: 135499.72569963682 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 135499.72569963682
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

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EVENT time: 135509.55293435467 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 135509.55293435467
Recieved ACK for last sent packet. Stopping Timer at
135509.55293435467
Sliding window 1 times
New send_base: 15 send_end: 6

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 135513.44950712606 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135513.44950712606
generateNextArrival(): future time for event 1 at entity 0 will be
135636.34144108402
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: −1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
startTimer: starting timer at 135513.44950712606
Packet: 15 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 135513.45
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 135543.44950712606 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 135543.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: −1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 135543.44950712606
Starting timer for packet 15 at time 135543.44950712606
_____

EVENT time: 135573.44950712606 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 135573.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: −1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 135573.44950712606
Starting timer for packet 15 at time 135573.44950712606
_____

EVENT time: 135581.66692098757 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 135581.66692098757
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

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EVENT time: 135591.59331034272 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 135591.59331034272
Recieved ACK for last sent packet. Stopping Timer at
135591.59331034272
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

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EVENT time: 135636.34144108402 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135636.34144108402
generateNextArrival(): future time for event 1 at entity 0 will be
135858.45515305034
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135636.34144108402
Packet: 0 With Payload: cccccccccccccccccccc sent to B
Timer started at: 135636.34
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 135639.0273445845 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 135639.0273445845

Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 135648.42225409712 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 135648.42225409712
Recieved ACK for last sent packet. Stopping Timer at
135648.42225409712
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 135858.45515305034 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135858.45515305034
generateNextArrival(): future time for event 1 at entity 0 will be
135871.3583788568
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2002 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135858.45515305034
Packet: 1 With Payload: dddddddddddddddddddd sent to B
Timer started at: 135858.46
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 135861.4453871273 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 135861.4453871273
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:

toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 135867.65086825163 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 135867.65086825163
Recieved ACK for last sent packet. Stopping Timer at
135867.65086825163
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 135871.3583788568 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135871.3583788568
generateNextArrival(): future time for event 1 at entity 0 will be
135995.38560136725
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2023 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 135871.3583788568
Packet: 2 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 135871.36
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 135874.97540208139 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 135874.97540208139
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

```
EVENT time: 135878.54353465379  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 135878.54353465379
Recieved ACK for last sent packet. Stopping Timer at
135878.54353465379
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 135995.38560136725  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 135995.38560136725
generateNextArrival(): future time for event 1 at entity 0 will be
136127.82372508929
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: packet being lost
startTimer: starting timer at 135995.38560136725
Packet: 3 With Payload: ffffffffffffffffffff sent to B
Timer started at: 135995.39
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 136025.38560136725  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136025.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 136025.38560136725
Starting timer for packet 3 at time 136025.38560136725

_____


EVENT time: 136035.18948942536  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3      rcv_end: 10
```

Packet received is not corrupt. At time 136035.18948942536
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 136037.5273903623 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 79.0

_____

EVENT time: 136055.38560136725 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136055.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2044 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 136055.38560136725
Starting timer for packet 3 at time 136055.38560136725

_____

EVENT time: 136061.5880611591 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 136061.5880611591
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 136069.68736838893 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 80.0

_____

```
EVENT time: 136085.38560136725  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136085.39
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2044  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 136085.38560136725
Starting timer for packet 3 at time 136085.38560136725

_____


EVENT time: 136089.2289498581  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 136089.2289498581
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____


EVENT time: 136093.35493026522  type: 2  entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 136093.35493026522
Recieved ACK for last sent packet. Stopping Timer at
136093.35493026522
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 136127.82372508929  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 136127.82372508929
generateNextArrival(): future time for event 1 at entity 0 will be
136404.28479873046
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -2065  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 136127.82372508929
```

```
Packet: 4 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 136127.82
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____


EVENT time: 136132.25376140632  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4       rcv_end: 11
Packet received is not corrupt. At time 136132.25376140632
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 5     rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____


EVENT time: 136139.94793542285  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 81.0

_____


EVENT time: 136157.82372508929  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136157.82
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4  acknum: 0  checksum: -2065  payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 136157.82372508929
Starting timer for packet 4 at time 136157.82372508929

_____


EVENT time: 136164.39863277078  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 5       rcv_end: 12
Packet received is not corrupt. At time 136164.39863277078
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____
```

EVENT time: 136166.11770989106 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 136166.11770989106
Recieved ACK for last sent packet. Stopping Timer at
136166.11770989106
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 136404.28479873046 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 136404.28479873046
generateNextArrival(): future time for event 1 at entity 0 will be
136573.14981536305
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2086 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 136404.28479873046
Packet: 5 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 136404.28
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 136411.02587969607 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 136411.02587969607
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 136417.8430433058 type: 2 entity: 0
aInput()_____

Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 136417.8430433058
Recieved ACK for last sent packet. Stopping Timer at 136417.8430433058
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 136573.14981536305 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 136573.14981536305
generateNextArrival(): future time for event 1 at entity 0 will be
136810.26642658777
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 136573.14981536305
Packet: 6 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 136573.15
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 136574.35114597005 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 136574.35114597005
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 136581.33091219826 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 136581.33091219826
Recieved ACK for last sent packet. Stopping Timer at
136581.33091219826

Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 136810.26642658777 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 136810.26642658777
generateNextArrival(): future time for event 1 at entity 0 will be
136883.81603442493
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2128 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 136810.26642658777
Packet: 7 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 136810.27
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 136813.45799127175 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 136813.45799127175
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 136814.97381511892 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 136814.97381511892
Recieved ACK for last sent packet. Stopping Timer at
136814.97381511892
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 136883.81603442493 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 136883.81603442493
generateNextArrival(): future time for event 1 at entity 0 will be
137205.33463545647
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2149 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 136883.81603442493
Packet: 8 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 136883.82
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 136889.27799310288 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 136889.27799310288
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being lost
In order ACK 8 Sent

_____

EVENT time: 136913.81603442493 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136913.82
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2149 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 136913.81603442493
Starting timer for packet 8 at time 136913.81603442493

_____

EVENT time: 136919.9212622456 type: 2 entity: 1
bInput() _____

Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 136919.9212622456
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK8 Sent

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EVENT time: 136943.81603442493 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 136943.82
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2149 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 136943.81603442493
Starting timer for packet 8 at time 136943.81603442493

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EVENT time: 136945.32114627527 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 136945.32114627527
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

——————————————————————————————

EVENT time: 136953.4339121678 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 136953.4339121678
Recieved ACK for last sent packet. Stopping Timer at 136953.4339121678
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

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EVENT time: 137205.33463545647 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 137205.33463545647
generateNextArrival(): future time for event 1 at entity 0 will be
137459.1875972778
aOutput()_____
Send_Base: 9 Send_end: 0

NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2170 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 137205.33463545647
Packet: 9 With Payload: lllllllllllllllllll sent to B
Timer started at: 137205.33
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 137212.07599108867 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 137212.07599108867
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 137218.17407757812 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 137218.17407757812
Recieved ACK for last sent packet. Stopping Timer at
137218.17407757812
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 137459.1875972778 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 137459.1875972778
generateNextArrival(): future time for event 1 at entity 0 will be
137826.28864406268
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmm

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 137459.1875972778
Packet: 10 With Payload: mmmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 137459.19
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____


EVENT time: 137464.9187292093  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 137464.9187292093
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message mmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____


EVENT time: 137466.02227851195  type: 2  entity: 0
aInput()_____
Current Send_Base: 10    Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 82.0
_____


EVENT time: 137489.1875972778  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 137489.19
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2191  payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 137489.1875972778
Starting timer for packet 10 at time 137489.1875972778
_____


EVENT time: 137498.14551225325  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 11      rcv_end: 2
Packet received is not corrupt. At time 137498.14551225325
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
```

Packet received is outside of window. ACK10 Sent
_____

EVENT time: 137505.3266090885 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 137505.3266090885
Recieved ACK for last sent packet. Stopping Timer at 137505.3266090885
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 137826.28864406268 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 137826.28864406268
generateNextArrival(): future time for event 1 at entity 0 will be
137922.01910458697
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2212 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 137826.28864406268
Packet: 11 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 137826.29
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 137831.0188909574 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 137831.0188909574
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 137835.1305887021 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 137835.1305887021
Recieved ACK for last sent packet. Stopping Timer at 137835.1305887021
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 137922.01910458697  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 137922.01910458697
generateNextArrival(): future time for event 1 at entity 0 will be
138116.6417432173
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2233  payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 137922.01910458697
Packet: 12 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 137922.02
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____


EVENT time: 137926.21842097235  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 137926.21842097235
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 13       rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____


EVENT time: 137933.9664296396  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 137933.9664296396
Recieved ACK for last sent packet. Stopping Timer at 137933.9664296396
```

Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 138116.6417432173 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 138116.6417432173
generateNextArrival(): future time for event 1 at entity 0 will be
138140.34852137827
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 138116.6417432173
Packet: 13 With Payload: pppppppppppppppppppp sent to B
Timer started at: 138116.64
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 138122.84640034186 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 138122.84640034186
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____

EVENT time: 138129.08209479056 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 138129.08209479056
Recieved ACK for last sent packet. Stopping Timer at
138129.08209479056
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 138140.34852137827 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 138140.34852137827
generateNextArrival(): future time for event 1 at entity 0 will be
138470.5221716972
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2275 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 138140.34852137827
Packet: 14 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 138140.35
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 138141.92751854006 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 138141.92751854006
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 138150.87527085183 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 138150.87527085183
Recieved ACK for last sent packet. Stopping Timer at
138150.87527085183
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 138470.5221716972 type: 1 entity: 0
generateNextArrival(): called

```
generateNextArrival(): time is 138470.5221716972
generateNextArrival(): future time for event 1 at entity 0 will be
138605.35294656217
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2296  payload:
rrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 138470.5221716972
Packet: 15 With Payload: rrrrrrrrrrrrrrrrrr sent to B
Timer started at: 138470.52
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____


EVENT time: 138474.0139469589  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15        rcv_end: 6
Packet received is not corrupt. At time 138474.0139469589
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message rrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 0        rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____


EVENT time: 138475.65254676968  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 138475.65254676968
Recieved ACK for last sent packet. Stopping Timer at
138475.65254676968
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 138605.35294656217  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 138605.35294656217
generateNextArrival(): future time for event 1 at entity 0 will be
138877.10196234024
aOutput()_____
```

Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 138605.35294656217
Packet: 0 With Payload: sssssssssssssssssssss sent to B
Timer started at: 138605.35
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 138612.62495803714 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 138612.62495803714
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message sssssssssssssssssssss delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 138621.11346781833 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 138621.11346781833
Recieved ACK for last sent packet. Stopping Timer at
138621.11346781833
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 138877.10196234024 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 138877.10196234024
generateNextArrival(): future time for event 1 at entity 0 will be
139120.33448286392
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2322 payload:

tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 138877.10196234024
Packet: 1 With Payload: tttttttttttttttttttt sent to B
Timer started at: 138877.10
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 138886.94320505395 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 138886.94320505395
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 138891.66603595088 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 138891.66603595088
Recieved ACK for last sent packet. Stopping Timer at
138891.66603595088
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 139120.33448286392 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139120.33448286392
generateNextArrival(): future time for event 1 at entity 0 will be
139220.23987548455
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139120.33448286392
Packet: 2 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B

```
Timer started at: 139120.33
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____


EVENT time: 139127.54359569086  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2        rcv_end: 9
Packet received is not corrupt. At time 139127.54359569086
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 3      rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 139132.3095492417  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 139132.3095492417
Recieved ACK for last sent packet. Stopping Timer at 139132.3095492417
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 139220.23987548455  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139220.23987548455
generateNextArrival(): future time for event 1 at entity 0 will be
139509.4332712791
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2364  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139220.23987548455
Packet: 3 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 139220.24
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____
```

EVENT time: 139222.62996307266 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 139222.62996307266
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 139228.3586230049 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 83.0

_____

EVENT time: 139250.23987548455 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 139250.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 139250.23987548455
Starting timer for packet 3 at time 139250.23987548455

_____

EVENT time: 139258.6338999604 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 139258.6338999604
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 139268.53364665678 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received

stopTimer: stopping timer at 139268.53364665678
Recieved ACK for last sent packet. Stopping Timer at
139268.53364665678
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 139509.4332712791 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139509.4332712791
generateNextArrival(): future time for event 1 at entity 0 will be
139599.34080019538
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139509.4332712791
Packet: 4 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 139509.43
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 139518.99737540825 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 139518.99737540825
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 139526.10596026495 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 84.0
_____

EVENT time: 139539.4332712791 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 139539.43
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 139539.4332712791
Starting timer for packet 4 at time 139539.4332712791

_____

EVENT time: 139540.74336985388 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 139540.74336985388
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 139543.51853999458 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 139543.51853999458
Recieved ACK for last sent packet. Stopping Timer at
139543.51853999458
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 139599.34080019538 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139599.34080019538
generateNextArrival(): future time for event 1 at entity 0 will be
139653.28531754515
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2406 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139599.34080019538

Packet: 5 With Payload: xxxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 139599.34
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 139603.4494766076 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 139603.4494766076
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message xxxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 139609.9631336406 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 139609.9631336406
Recieved ACK for last sent packet. Stopping Timer at 139609.9631336406
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 139653.28531754515 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139653.28531754515
generateNextArrival(): future time for event 1 at entity 0 will be
139988.83022553183
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139653.28531754515
Packet: 6 With Payload: yyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 139653.29
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 139660.67571031835 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 139660.67571031835
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 139670.36533707698 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 139670.36533707698
Recieved ACK for last sent packet. Stopping Timer at
139670.36533707698
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 139988.83022553183 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 139988.83022553183
generateNextArrival(): future time for event 1 at entity 0 will be
140115.04257332077
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −2448 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 139988.83022553183
Packet: 7 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 139988.83
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 139995.31723990606 type: 2 entity: 1
bInput() _____

Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 139995.31723990606
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 139999.0584124272 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 139999.0584124272
Recieved ACK for last sent packet. Stopping Timer at 139999.0584124272
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 140115.04257332077 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 140115.04257332077
generateNextArrival(): future time for event 1 at entity 0 will be
140505.78936124765
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −1949 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 140115.04257332077
Packet: 8 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 140115.04
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 140117.0569170202 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 140117.0569170202
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 9   rcv_end = 0

toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 140126.7418744469 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 140126.7418744469
Recieved ACK for last sent packet. Stopping Timer at 140126.7418744469
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 140505.78936124765 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 140505.78936124765
generateNextArrival(): future time for event 1 at entity 0 will be
140547.1724600971
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 140505.78936124765
Packet: 9 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 140505.79
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 140512.635914182 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 140512.635914182
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 140518.11984618675 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 140518.11984618675
Recieved ACK for last sent packet. Stopping Timer at
140518.11984618675
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 140547.1724600971 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 140547.1724600971
generateNextArrival(): future time for event 1 at entity 0 will be
140672.23731192973
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1991 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 140547.1724600971
Packet: 10 With Payload: cccccccccccccccccccc sent to B
Timer started at: 140547.17
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 140550.1769768365 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 140550.1769768365
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 140555.3505355999 type: 2 entity: 0
aInput()_____

Current Send_Base: 10   Send_end: 1
Received Corrupted ACK
Number of Corruped Packets to A: 85.0
_____

EVENT time: 140577.1724600971 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 140577.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -1991 payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 140577.1724600971
Starting timer for packet 10 at time 140577.1724600971

_____

EVENT time: 140579.45762504963 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 140579.45762504963
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent

_____

EVENT time: 140585.68260750148 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 140585.68260750148
Recieved ACK for last sent packet. Stopping Timer at
140585.68260750148
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 140672.23731192973 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 140672.23731192973
generateNextArrival(): future time for event 1 at entity 0 will be
140679.1344950713
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11

NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 140672.23731192973
Packet: 11 With Payload: dddddddddddddddddddd sent to B
Timer started at: 140672.24
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 140679.1344950713 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 140679.1344950713
generateNextArrival(): future time for event 1 at entity 0 will be
141001.65410321366
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being lost
stopTimer: stopping timer at 140679.1344950713
startTimer: starting timer at 140679.1344950713
Packet: 12 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 140679.13
Packet added to retransmission buffer at index [1]
Next sequence number: 13

_____

EVENT time: 140679.32667012548 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 140679.32667012548
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
In order ACK 11 Sent

_____

EVENT time: 140709.1344950713 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 140709.13
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 11 acknum: 0 checksum: −2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
toLayer3: seqnum: 12 acknum: 0 checksum: −2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 140709.1344950713
Starting timer for packet 12 at time 140709.1344950713
_____

EVENT time: 140718.07730338455 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 140718.07730338455
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 140727.2030396436 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 140727.70595416124 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 140739.1344950713 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 140739.13
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: −2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 140739.1344950713

Starting timer for packet 12 at time 140739.1344950713
_____

EVENT time: 140740.43443098245 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 140740.43443098245
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message eeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 140749.5653859066 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 140749.5653859066
Recieved ACK for last sent packet. Stopping Timer at 140749.5653859066
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 141001.65410321366 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 141001.65410321366
generateNextArrival(): future time for event 1 at entity 0 will be
141390.50874355301
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2054 payload:
fffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 141001.65410321366
Packet: 13 With Payload: fffffffffffffffffff sent to B
Timer started at: 141001.65
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 141010.09537034217 type: 2 entity: 1

```
bInput() _____
Packet 13 received. rcv_base: 13        rcv_end: 4
Packet received is not corrupt. At time 141010.09537034217
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 14      rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____


EVENT time: 141012.33906064034  type: 2  entity: 0
aInput()_____
Current Send_Base: 13    Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 141012.33906064034
Recieved ACK for last sent packet. Stopping Timer at
141012.33906064034
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 141390.50874355301  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 141390.50874355301
generateNextArrival(): future time for event 1 at entity 0 will be
141771.2210455642
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2075  payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 141390.50874355301
Packet: 14 With Payload: gggggggggggggggggggg sent to B
Timer started at: 141390.51
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 141392.28440198986  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 141392.28440198986
Packet received is in order. Delivering packet(s) to layer5
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Packet 14 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

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EVENT time: 141397.56288338883 type: 2 entity: 0
aInput()————————————————————————————————
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 141397.56288338883
Recieved ACK for last sent packet. Stopping Timer at
141397.56288338883
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

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EVENT time: 141771.2210455642 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 141771.2210455642
generateNextArrival(): future time for event 1 at entity 0 will be
141887.1547593616
aOutput()————————————————————————————————
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 141771.2210455642
Packet: 15 With Payload: hhhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 141771.22
Packet added to retransmission buffer at index [0]
Next sequence number: 0

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EVENT time: 141778.70921964178 type: 2 entity: 1
bInput() ————————————————————————————————
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 141778.70921964178
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message hhhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being lost

In order ACK 15 Sent

_____

EVENT time: 141801.2210455642 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 141801.22
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 141801.2210455642
Starting timer for packet 15 at time 141801.2210455642

_____

EVENT time: 141831.2210455642 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 141831.22
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2096 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 141831.2210455642
Starting timer for packet 15 at time 141831.2210455642

_____

EVENT time: 141839.15390484335 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 141839.15390484335
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 141844.0912503434 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 141844.0912503434
Recieved ACK for last sent packet. Stopping Timer at 141844.0912503434
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

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EVENT time: 141887.1547593616  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 141887.1547593616
generateNextArrival(): future time for event 1 at entity 0 will be
142025.55009613337
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2101  payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 141887.1547593616
Packet: 0 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 141887.15
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____


EVENT time: 141893.1885738701  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0       rcv_end: 7
Packet received is not corrupt. At time 141893.1885738701
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 141902.55519272445  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 141902.55519272445
Recieved ACK for last sent packet. Stopping Timer at
141902.55519272445
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

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EVENT time: 142025.55009613337  type: 1  entity: 0
generateNextArrival(): called
```

generateNextArrival(): time is 142025.55009613337
generateNextArrival(): future time for event 1 at entity 0 will be
142131.05868709378
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 142025.55009613337
Packet: 1 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 142025.55
Packet added to retransmission buffer at index [0]
Next sequence number: 2

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EVENT time: 142029.3099459823 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 142029.3099459823
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 142030.81478316605 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 142030.81478316605
Recieved ACK for last sent packet. Stopping Timer at
142030.81478316605
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 142131.05868709378 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 142131.05868709378
generateNextArrival(): future time for event 1 at entity 0 will be
142455.28733176677
aOutput()_____

Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −2143 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 142131.05868709378
Packet: 2 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 142131.06
Packet added to retransmission buffer at index [0]
Next sequence number: 3

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EVENT time: 142140.68019653927 type: 2 entity: 1
bInput() ————————————————————————
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 142140.68019653927
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

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EVENT time: 142144.20603045754 type: 2 entity: 0
aInput()————————————————————————
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 142144.20603045754
Recieved ACK for last sent packet. Stopping Timer at
142144.20603045754
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

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EVENT time: 142455.28733176677 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 142455.28733176677
generateNextArrival(): future time for event 1 at entity 0 will be
142739.95178075507
aOutput()————————————————————————
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2164 payload:

llllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 142455.28733176677
Packet: 3 With Payload: llllllllllllllllll sent to B
Timer started at: 142455.29
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 142485.28733176677 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 142485.29
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2164 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 142485.28733176677
Starting timer for packet 3 at time 142485.28733176677
_____

EVENT time: 142489.07931760617 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 142489.07931760617
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 142490.40644550923 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 142490.40644550923
Recieved ACK for last sent packet. Stopping Timer at
142490.40644550923
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 142739.95178075507 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 142739.95178075507
generateNextArrival(): future time for event 1 at entity 0 will be
143068.14783165994
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -2185  payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 142739.95178075507
Packet: 4 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 142739.95
Packet added to retransmission buffer at index [0]
Next sequence number: 5

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EVENT time: 142741.60603656122  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 142741.60603656122
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 5     rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 142747.00262459187  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 142747.00262459187
Recieved ACK for last sent packet. Stopping Timer at
142747.00262459187
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 143068.14783165994  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 143068.14783165994
generateNextArrival(): future time for event 1 at entity 0 will be
143384.36841944643
```

```
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2206  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being lost
startTimer: starting timer at 143068.14783165994
Packet: 5 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 143068.15
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____


EVENT time: 143098.14783165994  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 143098.15
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2206  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 143098.14783165994
Starting timer for packet 5 at time 143098.14783165994

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EVENT time: 143106.73604541158  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 143128.14783165994  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 143128.15
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2206  payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 143128.14783165994
Starting timer for packet 5 at time 143128.14783165994

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EVENT time: 143131.6346629231  type: 2  entity: 1
```

bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 143131.6346629231
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 143141.0284737694 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 143141.0284737694
Recieved ACK for last sent packet. Stopping Timer at 143141.0284737694
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 143384.36841944643 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 143384.36841944643
generateNextArrival(): future time for event 1 at entity 0 will be
143683.92590105903
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2227 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 143384.36841944643
Packet: 6 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 143384.37
Packet added to retransmission buffer at index [0]
Next sequence number: 7

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EVENT time: 143386.21137119667 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 143386.21137119667
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ooooooooooooooooooooo delivered to Layer 5

New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 143390.95782341994 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 143390.95782341994
Recieved ACK for last sent packet. Stopping Timer at
143390.95782341994
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 143683.92590105903 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 143683.92590105903
generateNextArrival(): future time for event 1 at entity 0 will be
143978.4295175024
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 143683.92590105903
Packet: 7 With Payload: pppppppppppppppppppp sent to B
Timer started at: 143683.93
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 143687.58357493824 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 143687.58357493824
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

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EVENT time: 143691.62715536976 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 143691.62715536976
Recieved ACK for last sent packet. Stopping Timer at
143691.62715536976
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

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EVENT time: 143978.4295175024 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 143978.4295175024
generateNextArrival(): future time for event 1 at entity 0 will be
144299.66734824676
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2269 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 143978.4295175024
Packet: 8 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 143978.43
Packet added to retransmission buffer at index [0]
Next sequence number: 9

——————————————————————

EVENT time: 143988.09277626884 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 143988.09277626884
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: packet being lost
In order ACK 8 Sent

——————————————————————

EVENT time: 144008.4295175024 type: 0 entity: 0

```
aTimerInterrup()_____
TIMEOUT!!! at: 144008.43
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2269  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 144008.4295175024
Starting timer for packet 8 at time 144008.4295175024

_____


EVENT time: 144009.77559739986  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 9        rcv_end: 0
Packet received is not corrupt. At time 144009.77559739986
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

_____


EVENT time: 144018.95104831085  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 144018.95104831085
Recieved ACK for last sent packet. Stopping Timer at
144018.95104831085
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 144299.66734824676  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 144299.66734824676
generateNextArrival(): future time for event 1 at entity 0 will be
144300.16785180217
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2290  payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 144299.66734824676
Packet: 9 With Payload: rrrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 144299.67
```

Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 144300.16785180217 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 144300.16785180217
generateNextArrival(): future time for event 1 at entity 0 will be
144650.45930356765
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2311 payload:
sssssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 144300.16785180217
startTimer: starting timer at 144300.16785180217
Packet: 10 With Payload: sssssssssssssssssssss sent to B
Timer started at: 144300.17
Packet added to retransmission buffer at index [1]
Next sequence number: 11
_____

EVENT time: 144304.84475234235 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 144304.84475234235
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 144309.9760124516 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

```
EVENT time: 144313.1956541643  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 144330.16785180217  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 144330.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2311  payload:
sssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 144330.16785180217
Starting timer for packet 10 at time 144330.16785180217

_____


EVENT time: 144339.96432386246  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 144360.16785180217  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 144360.17
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2311  payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 144360.16785180217
Starting timer for packet 10 at time 144360.16785180217

_____


EVENT time: 144368.05648976107  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is not corrupt. At time 144368.05648976107
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
```

In order ACK 10 Sent

_____

EVENT time: 144375.8965117344 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 144375.8965117344
Recieved ACK for last sent packet. Stopping Timer at 144375.8965117344
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 144650.45930356765 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 144650.45930356765
generateNextArrival(): future time for event 1 at entity 0 will be
144798.93795587026
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2332 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 144650.45930356765
Packet: 11 With Payload: tttttttttttttttttttt sent to B
Timer started at: 144650.46
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 144653.23667104103 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 144653.23667104103
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 144662.84527115698 type: 2 entity: 0

```
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 144662.84527115698
Recieved ACK for last sent packet. Stopping Timer at
144662.84527115698
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 144798.93795587026  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 144798.93795587026
generateNextArrival(): future time for event 1 at entity 0 will be
144896.84133426927
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 144798.93795587026
Packet: 12 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 144798.94
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 144804.6968291269  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 144828.93795587026  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 144828.94
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 144828.93795587026
Starting timer for packet 12 at time 144828.93795587026
```

_____

EVENT time: 144832.39045381025 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 144832.39045381025
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 144837.47639393294 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 144837.47639393294
Recieved ACK for last sent packet. Stopping Timer at
144837.47639393294
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 144896.84133426927 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 144896.84133426927
generateNextArrival(): future time for event 1 at entity 0 will be
145265.17532883698
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2374 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 144896.84133426927
Packet: 13 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 144896.84
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 144901.90887173073 type: 2 entity: 1

```
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 144901.90887173073
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 14      rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____


EVENT time: 144926.84133426927  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 144926.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: packet being lost
Retransmitting Packet 13
startTimer: starting timer at 144926.84133426927
Starting timer for packet 13 at time 144926.84133426927

_____


EVENT time: 144956.84133426927  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 144956.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 144956.84133426927
Starting timer for packet 13 at time 144956.84133426927

_____


EVENT time: 144966.08243049413  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 14      rcv_end: 5
Packet received is not corrupt. At time 144966.08243049413
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: packet being lost
Packet received is outside of window. ACK13 Sent

_____


EVENT time: 144986.84133426927  type: 0  entity: 0
aTimerInterrup()_____
```

```
TIMEOUT!!! at: 144986.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 144986.84133426927
Starting timer for packet 13 at time 144986.84133426927

_____


EVENT time: 144993.60466322827  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 14        rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 145016.84133426927  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145016.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 145016.84133426927
Starting timer for packet 13 at time 145016.84133426927

_____


EVENT time: 145022.29258095036  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 14        rcv_end: 5
Packet received is not corrupt. At time 145022.29258095036
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____


EVENT time: 145027.9152195807  type: 2  entity: 0
aInput()_____
Current Send_Base: 13    Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 145027.9152195807
Recieved ACK for last sent packet. Stopping Timer at 145027.9152195807
Sliding window 1 times
New send_base: 14 send_end: 5
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 145265.17532883698 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 145265.17532883698
generateNextArrival(): future time for event 1 at entity 0 will be
145464.71755119483
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 145265.17532883698
Packet: 14 With Payload: wwwwwwwwwwwwwwwwwww sent to B
Timer started at: 145265.18
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 145273.72014526813 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 145273.72014526813
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 145277.3245338298 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 145277.3245338298
Recieved ACK for last sent packet. Stopping Timer at 145277.3245338298
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 145464.71755119483 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 145464.71755119483
generateNextArrival(): future time for event 1 at entity 0 will be
145862.76436658835
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 145464.71755119483
Packet: 15 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 145464.72
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 145471.15842158272 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 145471.15842158272
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 145480.0633259072 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 86.0

_____

EVENT time: 145494.71755119483 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145494.72
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 145494.71755119483

Starting timer for packet 15 at time 145494.71755119483
_____

EVENT time: 145500.34183782467 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 145500.34183782467
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent
_____

EVENT time: 145510.2706991791 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 145510.2706991791
Recieved ACK for last sent packet. Stopping Timer at 145510.2706991791
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 145862.76436658835 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 145862.76436658835
generateNextArrival(): future time for event 1 at entity 0 will be
146109.8788415174
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 145862.76436658835
Packet: 0 With Payload: yyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 145862.76
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 145865.60106204415 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7

Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 145892.76436658835 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145892.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 145892.76436658835
Starting timer for packet 0 at time 145892.76436658835

_____

EVENT time: 145901.70744956817 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 145922.76436658835 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145922.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 145922.76436658835
Starting timer for packet 0 at time 145922.76436658835

_____

EVENT time: 145924.1214331492 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 145924.1214331492
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being lost
In order ACK 0 Sent

_____

```
EVENT time: 145952.76436658835  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145952.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: −2421  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 145952.76436658835
Starting timer for packet 0 at time 145952.76436658835

_____


EVENT time: 145957.5113681448  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1      rcv_end: 8
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 145982.76436658835  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 145982.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0  acknum: 0  checksum: −2421  payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 145982.76436658835
Starting timer for packet 0 at time 145982.76436658835

_____


EVENT time: 145985.74251533556  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 145985.74251533556
toLayer3: seqnum: 0  acknum: 0  checksum: −1  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____


EVENT time: 145989.1214026307  type: 2  entity: 0
aInput()_____
Current Send_Base: 0    Send_end: 7
Received Corrupted ACK
```

Number of Corruped Packets to A: 87.0
_____

EVENT time: 146012.76436658835 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 146012.76
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 146012.76436658835
Starting timer for packet 0 at time 146012.76436658835

_____

EVENT time: 146021.2775963622 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 146021.2775963622
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

_____

EVENT time: 146031.1397137364 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 146031.1397137364
Recieved ACK for last sent packet. Stopping Timer at 146031.1397137364
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 146109.8788415174 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 146109.8788415174
generateNextArrival(): future time for event 1 at entity 0 will be
146369.8843348491
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2442 payload:
zzzzzzzzzzzzzzzzzzzz

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 146109.8788415174
Packet: 1 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 146109.88
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____


EVENT time: 146113.63045136878  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 146113.63045136878
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____


EVENT time: 146119.77880184335  type: 2  entity: 0
aInput()_____
Current Send_Base: 1    Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 146119.77880184335
Recieved ACK for last sent packet. Stopping Timer at
146119.77880184335
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 146369.8843348491  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 146369.8843348491
generateNextArrival(): future time for event 1 at entity 0 will be
146439.4665364544
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2  acknum: 0  checksum: -1943  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being lost
startTimer: starting timer at 146369.8843348491
Packet: 2 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 146369.88
```

```
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____


EVENT time: 146399.8843348491  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 146399.88
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -1943  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 146399.8843348491
Starting timer for packet 2 at time 146399.8843348491

_____


EVENT time: 146403.48460341198  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 2      rcv_end: 9
Packet received is not corrupt. At time 146403.48460341198
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 3     rcv_end = 10
toLayer3: seqnum: 0  acknum: 2  checksum: -3  payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____


EVENT time: 146409.09955137793  type: 2  entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 146409.09955137793
Recieved ACK for last sent packet. Stopping Timer at
146409.09955137793
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 146439.4665364544  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 146439.4665364544
generateNextArrival(): future time for event 1 at entity 0 will be
146452.4307992798
aOutput()_____
```

Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 146439.4665364544
Packet: 3 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 146439.47
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 146440.53657643363 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 146440.53657643363
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 146445.13498336743 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 88.0

_____

EVENT time: 146452.4307992798 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 146452.4307992798
generateNextArrival(): future time for event 1 at entity 0 will be
146659.96887112036
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1985 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 146452.4307992798

```
startTimer: starting timer at 146452.4307992798
Packet: 4 With Payload: cccccccccccccccccccc sent to B
Timer started at: 146452.43
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____


EVENT time: 146457.62028870513  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 146482.4307992798  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 146482.43
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -1964  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
toLayer3: seqnum: 4  acknum: 0  checksum: -1985  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 146482.4307992798
Starting timer for packet 4 at time 146482.4307992798

_____


EVENT time: 146488.79586169016  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 146488.79586169016
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____


EVENT time: 146491.30570390946  type: 2  entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____
```

EVENT time: 146493.9831537828 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 146493.9831537828
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent

_____

EVENT time: 146512.4307992798 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 146512.43
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -1985 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 146512.4307992798
Starting timer for packet 4 at time 146512.4307992798

_____

EVENT time: 146515.23426007878 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 146515.23426007878
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 146518.1541795099 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 146518.1541795099
Recieved ACK for last sent packet. Stopping Timer at 146518.1541795099
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 146659.96887112036  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 146659.96887112036
generateNextArrival(): future time for event 1 at entity 0 will be
147017.8655354473
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2006  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 146659.96887112036
Packet: 5 With Payload: dddddddddddddddddddd sent to B
Timer started at: 146659.97
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____


EVENT time: 146667.65837580495  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5       rcv_end: 12
Packet received is not corrupt. At time 146667.65837580495
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 6       rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 146674.64775536367  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Received Corrupted ACK
Number of Corruped Packets to A: 89.0

_____


EVENT time: 146689.96887112036  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 146689.97
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5  acknum: 0  checksum: -2006  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
```

startTimer: starting timer at 146689.96887112036
Starting timer for packet 5 at time 146689.96887112036
_____

EVENT time: 146694.94109927674 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 146694.94109927674
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 146700.5780205695 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 146700.5780205695
Recieved ACK for last sent packet. Stopping Timer at 146700.5780205695
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 147017.8655354473 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 147017.8655354473
generateNextArrival(): future time for event 1 at entity 0 will be
147396.77114169748
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 147017.8655354473
Packet: 6 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 147017.87
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 147022.37302774136 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13

Packet received is not corrupt. At time 147022.37302774136
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 147024.08084353164 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 147024.08084353164
Recieved ACK for last sent packet. Stopping Timer at
147024.08084353164
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 147396.77114169748 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 147396.77114169748
generateNextArrival(): future time for event 1 at entity 0 will be
147678.53022858367
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2048 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 147396.77114169748
Packet: 7 With Payload: ffffffffffffffffffff sent to B
Timer started at: 147396.77
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 147399.31092257457 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 147399.31092257457
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 8   rcv_end = 15

toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
——————————————————————————————

EVENT time: 147402.72139652702 type: 2 entity: 0
aInput()——————————————————————————————
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 147402.72139652702
Recieved ACK for last sent packet. Stopping Timer at
147402.72139652702
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
——————————————————————————————

EVENT time: 147678.53022858367 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 147678.53022858367
generateNextArrival(): future time for event 1 at entity 0 will be
147908.38343455308
aOutput()——————————————————————————————
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2069 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 147678.53022858367
Packet: 8 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 147678.53
Packet added to retransmission buffer at index [0]
Next sequence number: 9
——————————————————————————————

EVENT time: 147682.326883755 type: 2 entity: 1
bInput() ——————————————————————————————
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 147682.326883755
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

———————————————————————

EVENT time: 147689.77248451186 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Received Corrupted ACK
Number of Corruped Packets to A: 90.0

———————————————————————

EVENT time: 147708.53022858367 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 147708.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2069 payload:
gggggggggggggggggggg
toLayer3: packet being lost
Retransmitting Packet 8
startTimer: starting timer at 147708.53022858367
Starting timer for packet 8 at time 147708.53022858367

———————————————————————

EVENT time: 147738.53022858367 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 147738.53
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2069 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 147738.53022858367
Starting timer for packet 8 at time 147738.53022858367

———————————————————————

EVENT time: 147746.35459456162 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 147746.35459456162
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK8 Sent

———————————————————————

EVENT time: 147755.6253547777 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15

Expected ACK 8 received
stopTimer: stopping timer at 147755.6253547777
Recieved ACK for last sent packet. Stopping Timer at 147755.6253547777
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 147908.38343455308 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 147908.38343455308
generateNextArrival(): future time for event 1 at entity 0 will be
148105.6672872097
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 147908.38343455308
Packet: 9 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 147908.38
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 147914.4059877316 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 147914.4059877316
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 147916.8257393109 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Received Corrupted ACK
Number of Corruped Packets to A: 91.0
_____

EVENT time: 147938.38343455308 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 147938.38
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 147938.38343455308
Starting timer for packet 9 at time 147938.38343455308

_____

EVENT time: 147940.1016876736 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 147940.1016876736
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 147947.90600299084 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 147947.90600299084
Recieved ACK for last sent packet. Stopping Timer at
147947.90600299084
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 148105.6672872097 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 148105.6672872097
generateNextArrival(): future time for event 1 at entity 0 will be
148259.71251564074
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2111 payload:
iiiiiiiiiiiiiiiiiiiii
toLayer3: packet being lost
startTimer: starting timer at 148105.6672872097

```
Packet: 10 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 148105.67
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____


EVENT time: 148135.6672872097  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 148135.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2111  payload:
iiiiiiiiiiiiiiiiiii
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 148135.6672872097
Starting timer for packet 10 at time 148135.6672872097

_____


EVENT time: 148137.76897488328  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 148165.6672872097  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 148165.67
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2111  payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 148165.6672872097
Starting timer for packet 10 at time 148165.6672872097

_____


EVENT time: 148167.02462843715  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10       rcv_end: 1
Packet received is not corrupt. At time 148167.02462843715
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
```

In order ACK 10 Sent

_____

EVENT time: 148170.3551744133 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 148170.3551744133
Recieved ACK for last sent packet. Stopping Timer at 148170.3551744133
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 148259.71251564074 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 148259.71251564074
generateNextArrival(): future time for event 1 at entity 0 will be
148489.5413068026
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 148259.71251564074
Packet: 11 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 148259.71
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 148261.83590197455 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 148261.83590197455
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 148265.77428510392 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Received Corrupted ACK
Number of Corruped Packets to A: 92.0

_____

EVENT time: 148289.71251564074 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 148289.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 148289.71251564074
Starting timer for packet 11 at time 148289.71251564074

_____

EVENT time: 148292.49894711142 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 148292.49894711142
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent

_____

EVENT time: 148296.75154881435 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 148296.75154881435
Recieved ACK for last sent packet. Stopping Timer at
148296.75154881435
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 148489.5413068026 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 148489.5413068026
generateNextArrival(): future time for event 1 at entity 0 will be
148887.1242408521
aOutput()_____

Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 148489.5413068026
Packet: 12 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 148489.54
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 148492.13794366285 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 148492.13794366285
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 148501.33893856624 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 148501.33893856624
Recieved ACK for last sent packet. Stopping Timer at
148501.33893856624
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 148887.1242408521 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 148887.1242408521
generateNextArrival(): future time for event 1 at entity 0 will be
149051.10629596852
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:

```
llllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 148887.1242408521
Packet: 13 With Payload: llllllllllllllllll sent to B
Timer started at: 148887.12
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____


EVENT time: 148917.1242408521  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 148917.12
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2174  payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 148917.1242408521
Starting timer for packet 13 at time 148917.1242408521
_____


EVENT time: 148921.63722647788  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 148921.63722647788
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 14     rcv_end = 5
toLayer3: seqnum: 0  acknum: 13  checksum: -14  payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____


EVENT time: 148930.69319742426  type: 2  entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 148930.69319742426
Recieved ACK for last sent packet. Stopping Timer at
148930.69319742426
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 149051.10629596852  type: 1  entity: 0
```

```
generateNextArrival(): called
generateNextArrival(): time is 149051.10629596852
generateNextArrival(): future time for event 1 at entity 0 will be
149244.94766075627
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -2195  payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: packet being lost
startTimer: starting timer at 149051.10629596852
Packet: 14 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 149051.11
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 149081.10629596852  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 149081.11
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14  acknum: 0  checksum: -2195  payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 149081.10629596852
Starting timer for packet 14 at time 149081.10629596852

_____


EVENT time: 149083.168980987  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14       rcv_end: 5
Packet received is not corrupt. At time 149083.168980987
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 15      rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 149087.85061189614  type: 2  entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 149087.85061189614
```

Recieved ACK for last sent packet. Stopping Timer at
149087.85061189614
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 149244.94766075627 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 149244.94766075627
generateNextArrival(): future time for event 1 at entity 0 will be
149288.35718863492
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 149244.94766075627
Packet: 15 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 149244.95
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 149248.69872127447 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 149248.69872127447
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 149253.80196539202 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 149253.80196539202
Recieved ACK for last sent packet. Stopping Timer at
149253.80196539202
Sliding window 1 times
New send_base: 0 send_end: 7

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 149288.35718863492 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 149288.35718863492
generateNextArrival(): future time for event 1 at entity 0 will be
149532.3709830012
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: −2221 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 149288.35718863492
Packet: 0 With Payload: oooooooooooooooooooo sent to B
Timer started at: 149288.36
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 149293.10281685845 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 149293.10281685845
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: −1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 149302.19037446214 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 149302.19037446214
Recieved ACK for last sent packet. Stopping Timer at
149302.19037446214
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 149532.3709830012 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 149532.3709830012
generateNextArrival(): future time for event 1 at entity 0 will be
149598.54731894896
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2242 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 149532.3709830012
Packet: 1 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 149532.37
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 149534.24744407483 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 149534.24744407483
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 149538.52146977143 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 149538.52146977143
Recieved ACK for last sent packet. Stopping Timer at
149538.52146977143
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 149598.54731894896 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 149598.54731894896
generateNextArrival(): future time for event 1 at entity 0 will be

149621.96111941893
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 149598.54731894896
Packet: 2 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 149598.55
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 149621.96111941893 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 149621.96111941893
generateNextArrival(): future time for event 1 at entity 0 will be
150008.19116794335
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 149621.96111941893
startTimer: starting timer at 149621.96111941893
Packet: 3 With Payload: rrrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 149621.96
Packet added to retransmission buffer at index [1]
Next sequence number: 4
_____

EVENT time: 149631.54994354077 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 149631.54994354077
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 1 Sent

_____

EVENT time: 149639.14770958587 type: 2 entity: 0
aInput()_____

Current Send_Base: 2   Send_end: 9
Received duplicate ACK 1
Send_Base: 2 Send_End: 9
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
Retransmitted packet: 2 Payload: qqqqqqqqqqqqqqqqqqqqq

_____

EVENT time: 149651.96111941893 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 149651.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 149651.96111941893
Starting timer for packet 3 at time 149651.96111941893

_____

EVENT time: 149654.2347483749 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 149654.2347483749
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
Packet 3 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
Cumulative ACK 3 Sent

_____

EVENT time: 149660.93050935393 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 149660.93050935393
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK3 Sent

_____

```
EVENT time: 149681.96111941893  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 149681.96
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2  acknum: 0  checksum: -2263  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
toLayer3: seqnum: 3  acknum: 0  checksum: -2284  payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 149681.96111941893
Starting timer for packet 3 at time 149681.96111941893

_____


EVENT time: 149688.19022186956  type: 2  entity: 1
bInput() _____
Packet 2 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 149688.19022186956
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____


EVENT time: 149691.43040253915  type: 2  entity: 0
aInput()_____
Current Send_Base: 2    Send_end: 9
Cumulative ACK 3received
stopTimer: stopping timer at 149691.43040253915
Recieved ACK for last sent packet. Stopping Timer at
149691.43040253915
Sliding window 2 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 149692.23050630206  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 149692.23050630206
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____
```

EVENT time: 149694.30417798393 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received duplicate ACK 3
Send_Base: 4 Send_End: 11
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 150008.19116794335 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 150008.19116794335
generateNextArrival(): future time for event 1 at entity 0 will be
150310.9836115604
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2305 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 150008.19116794335
Packet: 4 With Payload: ssssssssssssssssssss sent to B
Timer started at: 150008.19
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 150009.51939451278 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 150009.51939451278
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 150016.54503006075 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 150016.54503006075
Recieved ACK for last sent packet. Stopping Timer at
150016.54503006075

Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 150310.9836115604 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 150310.9836115604
generateNextArrival(): future time for event 1 at entity 0 will be
150378.93002105775
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 150310.9836115604
Packet: 5 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 150310.98
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 150312.40632343516 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 150312.40632343516
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 150315.1210669271 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 150315.1210669271
Recieved ACK for last sent packet. Stopping Timer at 150315.1210669271
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 150378.93002105775 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 150378.93002105775
generateNextArrival(): future time for event 1 at entity 0 will be
150654.60982085633
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being lost
startTimer: starting timer at 150378.93002105775
Packet: 6 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 150378.93
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 150408.93002105775 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 150408.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being lost
Retransmitting Packet 6
startTimer: starting timer at 150408.93002105775
Starting timer for packet 6 at time 150408.93002105775

_____

EVENT time: 150438.93002105775 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 150438.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 150438.93002105775
Starting timer for packet 6 at time 150438.93002105775

_____

EVENT time: 150446.4094058046 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13

Packet received is not corrupt. At time 150446.4094058046
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____

EVENT time: 150451.2931913205 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 150451.2931913205
Recieved ACK for last sent packet. Stopping Timer at 150451.2931913205
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 150654.60982085633 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 150654.60982085633
generateNextArrival(): future time for event 1 at entity 0 will be
150751.32908108766
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 150654.60982085633
Packet: 7 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 150654.61
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 150662.3614001892 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 150662.3614001892
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:

toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 150670.2003234962 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 93.0

_____

EVENT time: 150684.60982085633 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 150684.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2368 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 150684.60982085633
Starting timer for packet 7 at time 150684.60982085633

_____

EVENT time: 150688.01782280952 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 150688.01782280952
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 150694.7652211066 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received Corrupted ACK
Number of Corruped Packets to A: 94.0

_____

EVENT time: 150714.60982085633 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 150714.61
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 7 acknum: 0 checksum: −2368 payload:
vvvvvvvvvvvvvvvvvvvvvv
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 150714.60982085633
Starting timer for packet 7 at time 150714.60982085633

_____

EVENT time: 150744.60982085633 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 150744.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: −2368 payload:
vvvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 150744.60982085633
Starting timer for packet 7 at time 150744.60982085633

_____

EVENT time: 150745.94793542282 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 150745.94793542282
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK7 Sent

_____

EVENT time: 150751.32908108766 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 150751.32908108766
generateNextArrival(): future time for event 1 at entity 0 will be
151080.8435316019
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2389 payload:
wwwwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 150751.32908108766
startTimer: starting timer at 150751.32908108766
Packet: 8 With Payload: wwwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 150751.33
Packet added to retransmission buffer at index [1]
Next sequence number: 9

_____

EVENT time: 150752.599078341 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 150752.599078341
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 150757.28949858088 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Cumulative ACK 8received
stopTimer: stopping timer at 150757.28949858088
Recieved ACK for last sent packet. Stopping Timer at
150757.28949858088
Sliding window 2 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 151080.8435316019 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 151080.8435316019
generateNextArrival(): future time for event 1 at entity 0 will be
151452.90078432567
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 151080.8435316019
Packet: 9 With Payload: xxxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 151080.84
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 151087.46925260167 type: 2 entity: 1

bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 151087.46925260167
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 151090.78414258244 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 151090.78414258244
Recieved ACK for last sent packet. Stopping Timer at
151090.78414258244
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 151452.90078432567 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 151452.90078432567
generateNextArrival(): future time for event 1 at entity 0 will be
151790.35004730365
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2431 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 151452.90078432567
Packet: 10 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 151452.90
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 151461.00476088744 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 151461.00476088744
Packet received is in order. Delivering packet(s) to layer5

Packet 10 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 151462.70378734698 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 151462.70378734698
Recieved ACK for last sent packet. Stopping Timer at
151462.70378734698
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 151790.35004730365 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 151790.35004730365
generateNextArrival(): future time for event 1 at entity 0 will be
151943.6262092959
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2452 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 151790.35004730365
Packet: 11 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 151790.35
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 151792.16168706317 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 151792.16168706317
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side

In order ACK 11 Sent
_____

EVENT time: 151799.23374126403 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 151799.23374126403
Recieved ACK for last sent packet. Stopping Timer at
151799.23374126403
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 151943.6262092959 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 151943.6262092959
generateNextArrival(): future time for event 1 at entity 0 will be
152275.55772576065
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: −1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 151943.6262092959
Packet: 12 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 151943.63
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 151950.06762901696 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 151950.06762901696
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: −13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 151953.07104709002 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 151953.07104709002
Recieved ACK for last sent packet. Stopping Timer at
151953.07104709002
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 152275.55772576065 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 152275.55772576065
generateNextArrival(): future time for event 1 at entity 0 will be
152514.94491409036
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -1974 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 152275.55772576065
Packet: 13 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 152275.56
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 152279.025879696 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 152279.025879696
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 152288.8976104007 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received

```
stopTimer: stopping timer at 152288.8976104007
Recieved ACK for last sent packet. Stopping Timer at 152288.8976104007
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 152514.94491409036  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 152514.94491409036
generateNextArrival(): future time for event 1 at entity 0 will be
152613.04361095
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -1995  payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 152514.94491409036
Packet: 14 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 152514.94
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 152522.7302774132  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14      rcv_end: 5
Packet received is not corrupt. At time 152522.7302774132
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message ccccccccccccccccccccc delivered to Layer 5
New rcv_base = 15      rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 152526.66893520916  type: 2  entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 152526.66893520916
Recieved ACK for last sent packet. Stopping Timer at
152526.66893520916
Sliding window 1 times
New send_base: 15 send_end: 6
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 152613.04361095 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 152613.04361095
generateNextArrival(): future time for event 1 at entity 0 will be
153007.86767174286
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2016 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 152613.04361095
Packet: 15 With Payload: dddddddddddddddddddd sent to B
Timer started at: 152613.04
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 152621.7776726584 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 152621.7776726584
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 152630.08078249454 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 152630.08078249454
Recieved ACK for last sent packet. Stopping Timer at
152630.08078249454
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 153007.86767174286 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 153007.86767174286
generateNextArrival(): future time for event 1 at entity 0 will be
153354.20392468027
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2021 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 153007.86767174286
Packet: 0 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 153007.87
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 153011.06225775927 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 153011.06225775927
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 153012.62587359227 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 153012.62587359227
Recieved ACK for last sent packet. Stopping Timer at
153012.62587359227
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 153354.20392468027 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 153354.20392468027
generateNextArrival(): future time for event 1 at entity 0 will be

153686.9167149876
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 153354.20392468027
Packet: 1 With Payload: ffffffffffffffffffff sent to B
Timer started at: 153354.20
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 153361.39930417793 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 153361.39930417793
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 153365.94744712664 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 153365.94744712664
Recieved ACK for last sent packet. Stopping Timer at
153365.94744712664
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 153686.9167149876 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 153686.9167149876
generateNextArrival(): future time for event 1 at entity 0 will be
153724.9305703909
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2

NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
ggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 153686.9167149876
Packet: 2 With Payload: ggggggggggggggggggggg sent to B
Timer started at: 153686.92
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 153694.70207831045 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 153694.70207831045
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 153696.42857142852 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 153696.42857142852
Recieved ACK for last sent packet. Stopping Timer at
153696.42857142852
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 153724.9305703909 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 153724.9305703909
generateNextArrival(): future time for event 1 at entity 0 will be
153809.40580462044
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side

startTimer: starting timer at 153724.9305703909
Packet: 3 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 153724.93
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 153733.99972533336 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 153733.99972533336
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 153754.9305703909 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 153754.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 153754.9305703909
Starting timer for packet 3 at time 153754.9305703909

_____

EVENT time: 153757.85708182008 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 153757.85708182008
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 153766.53401287878 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 153766.53401287878
Recieved ACK for last sent packet. Stopping Timer at

153766.53401287878
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 153809.40580462044 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 153809.40580462044
generateNextArrival(): future time for event 1 at entity 0 will be
154106.80257576215
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2105 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 153809.40580462044
Packet: 4 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 153809.41
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 153813.8613849299 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 153813.8613849299
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent
_____

EVENT time: 153819.79549546796 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 153819.79549546796
Recieved ACK for last sent packet. Stopping Timer at
153819.79549546796
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 154106.80257576215 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154106.80257576215
generateNextArrival(): future time for event 1 at entity 0 will be
154278.85372478404
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 154106.80257576215
Packet: 5 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 154106.80
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 154114.49015778064 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 154136.80257576215 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 154136.80
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 154136.80257576215
Starting timer for packet 5 at time 154136.80257576215

_____

EVENT time: 154140.77639088102 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 154140.77639088102
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5

New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: –6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 154144.17203283787 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 154144.17203283787
Recieved ACK for last sent packet. Stopping Timer at
154144.17203283787
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 154278.85372478404 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154278.85372478404
generateNextArrival(): future time for event 1 at entity 0 will be
154373.15591906488
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: –2147 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 154278.85372478404
Packet: 6 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 154278.85
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 154283.2161931211 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 154283.2161931211
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: –7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

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EVENT time: 154284.73613696705 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 154284.73613696705
Recieved ACK for last sent packet. Stopping Timer at
154284.73613696705
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

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EVENT time: 154373.15591906488 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154373.15591906488
generateNextArrival(): future time for event 1 at entity 0 will be
154376.818140202
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
lllllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 154373.15591906488
Packet: 7 With Payload: lllllllllllllllllll sent to B
Timer started at: 154373.16
Packet added to retransmission buffer at index [0]
Next sequence number: 8

———————————————————————

EVENT time: 154376.818140202 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154376.818140202
generateNextArrival(): future time for event 1 at entity 0 will be
154656.05029450357
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2189 payload:
mmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 154376.818140202
startTimer: starting timer at 154376.818140202

```
Packet: 8 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 154376.82
Packet added to retransmission buffer at index [1]
Next sequence number: 9
_____


EVENT time: 154386.70003357032  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 154386.70003357032
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
Duplicate ACK 6 Sent

_____


EVENT time: 154390.20911282688  type: 2  entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Received duplicate ACK 6
Send_Base: 7 Send_End: 14
toLayer3: seqnum: 7  acknum: 0  checksum: -2168  payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitted packet: 7 Payload: lllllllllllllllllll

_____


EVENT time: 154397.49980162963  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 154397.49980162963
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message lllllllllllllllllll delivered to Layer 5
Packet 8 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 8 Sent

_____


EVENT time: 154403.24823755602  type: 2  entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Cumulative ACK 8received
stopTimer: stopping timer at 154403.24823755602
Recieved ACK for last sent packet. Stopping Timer at
```

154403.24823755602
Sliding window 2 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 154656.05029450357 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154656.05029450357
generateNextArrival(): future time for event 1 at entity 0 will be
154945.4023865474
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2210 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 154656.05029450357
Packet: 9 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 154656.05
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 154663.59367656478 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 154663.59367656478
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 154666.351268044 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 154666.351268044
Recieved ACK for last sent packet. Stopping Timer at 154666.351268044
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 154945.4023865474 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 154945.4023865474
generateNextArrival(): future time for event 1 at entity 0 will be
155286.84347056484
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2231 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 154945.4023865474
Packet: 10 With Payload: oooooooooooooooooooo sent to B
Timer started at: 154945.40
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 154947.87514877768 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 154947.87514877768
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 154951.5567186498 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 154951.5567186498
Recieved ACK for last sent packet. Stopping Timer at 154951.5567186498
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 155286.84347056484 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 155286.84347056484

generateNextArrival(): future time for event 1 at entity 0 will be
155650.97811822864
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2252 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 155286.84347056484
Packet: 11 With Payload: pppppppppppppppppppp sent to B
Timer started at: 155286.84
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 155290.5390484328 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 155290.5390484328
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 155295.52528458505 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 155295.52528458505
Recieved ACK for last sent packet. Stopping Timer at
155295.52528458505
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 155650.97811822864 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 155650.97811822864
generateNextArrival(): future time for event 1 at entity 0 will be
155845.9303567613
aOutput()_____
Send_Base: 12 Send_end: 3

NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2273 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 155650.97811822864
Packet: 12 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 155650.98
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 155654.8420667134 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 155654.8420667134
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 155662.9273659474 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 155662.9273659474
Recieved ACK for last sent packet. Stopping Timer at 155662.9273659474
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 155845.9303567613 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 155845.9303567613
generateNextArrival(): future time for event 1 at entity 0 will be
155915.7322916348
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2294 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: packet being lost

startTimer: starting timer at 155845.9303567613
Packet: 13 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 155845.93
Packet added to retransmission buffer at index [0]
Next sequence number: 14
_____

EVENT time: 155875.9303567613 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 155875.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: −2294 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 155875.9303567613
Starting timer for packet 13 at time 155875.9303567613

_____

EVENT time: 155881.66972869038 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 155881.66972869038
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 155905.9303567613 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 155905.93
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: −2294 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 155905.9303567613
Starting timer for packet 13 at time 155905.9303567613

_____

EVENT time: 155915.65623950918 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5

Packet received is not corrupt. At time 155915.65623950918
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent
_____

EVENT time: 155915.7322916348 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 155915.7322916348
generateNextArrival(): future time for event 1 at entity 0 will be
156239.93652150023
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2315 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 155915.7322916348
startTimer: starting timer at 155915.7322916348
Packet: 14 With Payload: ssssssssssssssssssss sent to B
Timer started at: 155915.73
Packet added to retransmission buffer at index [1]
Next sequence number: 15

_____

EVENT time: 155922.9288003173 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 155924.9783318582 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 155924.9783318582
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

```
EVENT time: 155929.29081087673  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 155929.29081087673
Recieved ACK for last sent packet. Stopping Timer at
155929.29081087673
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 156239.93652150023  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 156239.93652150023
generateNextArrival(): future time for event 1 at entity 0 will be
156465.44389172026
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2336  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 156239.93652150023
Packet: 15 With Payload: tttttttttttttttttttt sent to B
Timer started at: 156239.94
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____


EVENT time: 156241.0733054597  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 156241.0733054597
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 0     rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____


EVENT time: 156246.2034669026  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
```

```
Expected ACK 15 received
stopTimer: stopping timer at 156246.2034669026
Recieved ACK for last sent packet. Stopping Timer at 156246.2034669026
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 156465.44389172026  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 156465.44389172026
generateNextArrival(): future time for event 1 at entity 0 will be
156757.8356273079
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2341  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 156465.44389172026
Packet: 0 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 156465.44
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____


EVENT time: 156469.04168828388  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0        rcv_end: 7
Packet received is not corrupt. At time 156469.04168828388
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____


EVENT time: 156476.00772118283  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 156476.00772118283
Recieved ACK for last sent packet. Stopping Timer at
156476.00772118283
Sliding window 1 times
```

New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 156757.8356273079 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 156757.8356273079
generateNextArrival(): future time for event 1 at entity 0 will be
156825.31815546122
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2362 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 156757.8356273079
Packet: 1 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 156757.84
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 156765.6446119571 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 156765.6446119571
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 156768.36457411415 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 156768.36457411415
Recieved ACK for last sent packet. Stopping Timer at
156768.36457411415
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 156825.31815546122 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 156825.31815546122
generateNextArrival(): future time for event 1 at entity 0 will be
156905.8259834589
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2383 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 156825.31815546122
Packet: 2 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 156825.32
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 156826.6919766838 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 156826.6919766838
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 156835.72103030482 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 156835.72103030482
Recieved ACK for last sent packet. Stopping Timer at
156835.72103030482
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 156905.8259834589 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 156905.8259834589

generateNextArrival(): future time for event 1 at entity 0 will be
157211.6092410046
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2404 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 156905.8259834589
Packet: 3 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 156905.83
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 156909.46086001152 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 156909.46086001152
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 156919.16751609845 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 156919.16751609845
Recieved ACK for last sent packet. Stopping Timer at
156919.16751609845
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 157211.6092410046 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 157211.6092410046
generateNextArrival(): future time for event 1 at entity 0 will be
157544.99343852038
aOutput()_____
Send_Base: 4 Send_end: 11

NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 157211.6092410046
Packet: 4 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 157211.61
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 157217.87020477912 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 157241.6092410046 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 157241.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 157241.6092410046
Starting timer for packet 4 at time 157241.6092410046

_____

EVENT time: 157249.8752708517 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 157249.8752708517
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 157259.35944700454 type: 2 entity: 0
aInput()_____

Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 95.0
_____

EVENT time: 157271.6092410046 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 157271.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2425 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 157271.6092410046
Starting timer for packet 4 at time 157271.6092410046

_____

EVENT time: 157274.92110965293 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 157274.92110965293
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____

EVENT time: 157284.43824579602 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 157284.43824579602
Recieved ACK for last sent packet. Stopping Timer at
157284.43824579602
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 157544.99343852038 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 157544.99343852038
generateNextArrival(): future time for event 1 at entity 0 will be
157727.56736960958
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5

NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2446 payload:
zzzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 157544.99343852038
Packet: 5 With Payload: zzzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 157544.99
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 157548.404461806 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 157548.404461806
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message zzzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 157552.28901028464 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 157552.28901028464
Recieved ACK for last sent packet. Stopping Timer at
157552.28901028464
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 157727.56736960958 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 157727.56736960958
generateNextArrival(): future time for event 1 at entity 0 will be
157819.13510544135
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1947 payload:
aaaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted

```
toLayer3: scheduling arrival on other side
startTimer: starting timer at 157727.56736960958
Packet: 6 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 157727.57
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____


EVENT time: 157735.5532395397  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6        rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 157757.56736960958  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 157757.57
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -1947  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 157757.56736960958
Starting timer for packet 6 at time 157757.56736960958
_____


EVENT time: 157767.09329508338  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6        rcv_end: 13
Packet received is not corrupt. At time 157767.09329508338
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 7      rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent
_____


EVENT time: 157769.2707907345  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 157769.2707907345
Recieved ACK for last sent packet. Stopping Timer at 157769.2707907345
Sliding window 1 times
New send_base: 7 send_end: 14
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 157819.13510544135 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 157819.13510544135
generateNextArrival(): future time for event 1 at entity 0 will be
157891.42735068809
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: −1968 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 157819.13510544135
Packet: 7 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 157819.14
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 157821.5768303475 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 157821.5768303475
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 157830.4811853388 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 157830.4811853388
Recieved ACK for last sent packet. Stopping Timer at 157830.4811853388
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 157891.42735068809 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 157891.42735068809
generateNextArrival(): future time for event 1 at entity 0 will be
158025.5500961332
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -1989  payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 157891.42735068809
Packet: 8 With Payload: cccccccccccccccccccc sent to B
Timer started at: 157891.43
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____


EVENT time: 157900.68465224147  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8       rcv_end: 15
Packet received is not corrupt. At time 157900.68465224147
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 9     rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 157906.52262947467  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 157906.52262947467
Recieved ACK for last sent packet. Stopping Timer at
157906.52262947467
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 158025.5500961332  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158025.5500961332
generateNextArrival(): future time for event 1 at entity 0 will be
158113.46781823164
```

aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2010 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158025.5500961332
Packet: 9 With Payload: dddddddddddddddddddd sent to B
Timer started at: 158025.55
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 158029.7551805169 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 158029.7551805169
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 158035.90517899097 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 158035.90517899097
Recieved ACK for last sent packet. Stopping Timer at
158035.90517899097
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 158113.46781823164 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158113.46781823164
generateNextArrival(): future time for event 1 at entity 0 will be
158510.29389324613
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window

toLayer3: seqnum: 10 acknum: 0 checksum: −2031 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158113.46781823164
Packet: 10 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 158113.47
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 158116.06500442507 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 158116.06500442507
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 158121.02816858413 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 158121.02816858413
Recieved ACK for last sent packet. Stopping Timer at
158121.02816858413
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 158510.29389324613 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158510.29389324613
generateNextArrival(): future time for event 1 at entity 0 will be
158710.9591967527
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2052 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158510.29389324613

Packet: 11 With Payload: ffffffffffffffffffff sent to B
Timer started at: 158510.29
Packet added to retransmission buffer at index [0]
Next sequence number: 12
_____

EVENT time: 158513.00122074026 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 158513.00122074026
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: packet being lost
In order ACK 11 Sent

_____

EVENT time: 158540.29389324613 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 158540.29
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2052 payload:
ffffffffffffffffffff
toLayer3: packet being lost
Retransmitting Packet 11
startTimer: starting timer at 158540.29389324613
Starting timer for packet 11 at time 158540.29389324613

_____

EVENT time: 158570.29389324613 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 158570.29
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2052 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 158570.29389324613
Starting timer for packet 11 at time 158570.29389324613

_____

EVENT time: 158578.20725119772 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 158578.20725119772

toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK11 Sent
_____

EVENT time: 158579.2300485243 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 158579.2300485243
Recieved ACK for last sent packet. Stopping Timer at 158579.2300485243
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 158710.9591967527 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158710.9591967527
generateNextArrival(): future time for event 1 at entity 0 will be
158725.15640736092
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2073 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158710.9591967527
Packet: 12 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 158710.96
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 158718.37870418394 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 158718.37870418394
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 158721.26841029068 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 158721.26841029068
Recieved ACK for last sent packet. Stopping Timer at
158721.26841029068
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 158725.15640736092 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158725.15640736092
generateNextArrival(): future time for event 1 at entity 0 will be
158817.40775780496
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: −2094 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158725.15640736092
Packet: 13 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 158725.16
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 158733.71275978867 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 158733.71275978867
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: −14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 158737.29847102254 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4

Expected ACK 13 received
stopTimer: stopping timer at 158737.29847102254
Recieved ACK for last sent packet. Stopping Timer at
158737.29847102254
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 158817.40775780496 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158817.40775780496
generateNextArrival(): future time for event 1 at entity 0 will be
158928.71486556582
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2115 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158817.40775780496
Packet: 14 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 158817.41
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 158824.62346262994 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 158824.62346262994
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 158832.2610553299 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 158832.2610553299
Recieved ACK for last sent packet. Stopping Timer at 158832.2610553299
Sliding window 1 times

New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 158928.71486556582 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 158928.71486556582
generateNextArrival(): future time for event 1 at entity 0 will be
159017.8777428509
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2136 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 158928.71486556582
Packet: 15 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 158928.71
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 158930.60451063555 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 158930.60451063555
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 158937.2815942868 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 158937.2815942868
Recieved ACK for last sent packet. Stopping Timer at 158937.2815942868
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 159017.8777428509 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 159017.8777428509
generateNextArrival(): future time for event 1 at entity 0 will be
159309.46378978837
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2141 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 159017.8777428509
Packet: 0 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 159017.88
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 159023.16748557985 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 159023.16748557985
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 159028.3061616869 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 159028.3061616869
Recieved ACK for last sent packet. Stopping Timer at 159028.3061616869
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 159309.46378978837 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 159309.46378978837
generateNextArrival(): future time for event 1 at entity 0 will be
159337.08914456604

```
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2162  payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 159309.46378978837
Packet: 1 With Payload: llllllllllllllllllll sent to B
Timer started at: 159309.46
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____


EVENT time: 159312.9624317147  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1       rcv_end: 8
Packet received is not corrupt. At time 159312.9624317147
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 2      rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____


EVENT time: 159314.49858088917  type: 2  entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 159314.49858088917
Recieved ACK for last sent packet. Stopping Timer at
159314.49858088917
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 159337.08914456604  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 159337.08914456604
generateNextArrival(): future time for event 1 at entity 0 will be
159719.94994964433
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
```

toLayer3: seqnum: 2 acknum: 0 checksum: −2183 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 159337.08914456604
Packet: 2 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 159337.09
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 159345.92812891005 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 159345.92812891005
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 159347.7183446759 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK
Number of Corruped Packets to A: 96.0

_____

EVENT time: 159367.08914456604 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 159367.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2183 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 159367.08914456604
Starting timer for packet 2 at time 159367.08914456604

_____

EVENT time: 159373.5566576127 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 159373.5566576127

toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK2 Sent
_____

EVENT time: 159397.08914456604 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 159397.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2183 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being lost
Retransmitting Packet 2
startTimer: starting timer at 159397.08914456604
Starting timer for packet 2 at time 159397.08914456604

_____

EVENT time: 159427.08914456604 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 159427.09
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: −2183 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 159427.08914456604
Starting timer for packet 2 at time 159427.08914456604

_____

EVENT time: 159429.07217627476 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 159429.07217627476
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 159432.3464156009 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 159432.3464156009
Recieved ACK for last sent packet. Stopping Timer at 159432.3464156009
Sliding window 1 times
New send_base: 3 send_end: 10

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 159719.94994964433 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 159719.94994964433
generateNextArrival(): future time for event 1 at entity 0 will be
160036.08508560428
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2204 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 159719.94994964433
Packet: 3 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 159719.95
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 159725.81731620216 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 159725.81731620216
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 159732.16150395203 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 159732.16150395203
Recieved ACK for last sent packet. Stopping Timer at
159732.16150395203
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 160036.08508560428 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160036.08508560428
generateNextArrival(): future time for event 1 at entity 0 will be
160397.43644520387
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2225 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160036.08508560428
Packet: 4 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 160036.09
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 160041.41383098837 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 160041.41383098837
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 160044.8174382762 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 160044.8174382762
Recieved ACK for last sent packet. Stopping Timer at 160044.8174382762
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 160397.43644520387 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160397.43644520387
generateNextArrival(): future time for event 1 at entity 0 will be
160746.09210486145

```
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5  acknum: 0  checksum: -2246  payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160397.43644520387
Packet: 5 With Payload: pppppppppppppppppppp sent to B
Timer started at: 160397.44
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____


EVENT time: 160404.10913418976  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5       rcv_end: 12
Packet received is not corrupt. At time 160404.10913418976
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 6      rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____


EVENT time: 160405.7971739859  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 160405.7971739859
Recieved ACK for last sent packet. Stopping Timer at 160405.7971739859
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 160746.09210486145  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160746.09210486145
generateNextArrival(): future time for event 1 at entity 0 will be
160772.65541550936
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2267  payload:
```

qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160746.09210486145
Packet: 6 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 160746.09
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 160756.03744621098 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 160756.03744621098
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 160762.9705191197 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 160762.9705191197
Recieved ACK for last sent packet. Stopping Timer at 160762.9705191197
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 160772.65541550936 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160772.65541550936
generateNextArrival(): future time for event 1 at entity 0 will be
160900.45472579106
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2288 payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160772.65541550936
Packet: 7 With Payload: rrrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 160772.66

Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 160780.04635761576 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 160780.04635761576
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 160787.0925931576 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 160787.0925931576
Recieved ACK for last sent packet. Stopping Timer at 160787.0925931576
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 160900.45472579106 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160900.45472579106
generateNextArrival(): future time for event 1 at entity 0 will be
160995.85558641303
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2309 payload:
sssssssssssssssssssss
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160900.45472579106
Packet: 8 With Payload: sssssssssssssssssssss sent to B
Timer started at: 160900.45
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 160901.9112216558 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 160930.45472579106 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 160930.45
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: −2309 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 160930.45472579106
Starting timer for packet 8 at time 160930.45472579106
_____

EVENT time: 160932.33173619787 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 160932.33173619787
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 160935.69167149864 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 160935.69167149864
Recieved ACK for last sent packet. Stopping Timer at
160935.69167149864
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 160995.85558641303 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 160995.85558641303

generateNextArrival(): future time for event 1 at entity 0 will be
161226.61214026294
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2330 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 160995.85558641303
Packet: 9 With Payload: tttttttttttttttttttt sent to B
Timer started at: 160995.86
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 160998.55549790934 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 160998.55549790934
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 161002.57710501406 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 161002.57710501406
Recieved ACK for last sent packet. Stopping Timer at
161002.57710501406
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 161226.61214026294 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161226.61214026294
generateNextArrival(): future time for event 1 at entity 0 will be
161300.84536271234
aOutput()_____
Send_Base: 10 Send_end: 1

NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2351 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161226.61214026294
Packet: 10 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 161226.61
Packet added to retransmission buffer at index [0]
Next sequence number: 11

————————————————————————

EVENT time: 161230.59117404692 type: 2 entity: 1
bInput() ————————————————————————————
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

————————————————————————

EVENT time: 161256.61214026294 type: 0 entity: 0
aTimerInterrup()————————————————————————————
TIMEOUT!!! at: 161256.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: −2351 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 161256.61214026294
Starting timer for packet 10 at time 161256.61214026294

————————————————————————

EVENT time: 161265.59450056445 type: 2 entity: 1
bInput() ————————————————————————————
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 161265.59450056445
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: packet being lost
In order ACK 10 Sent

————————————————————————

EVENT time: 161286.61214026294 type: 0 entity: 0
aTimerInterrup()————————————————————————————
TIMEOUT!!! at: 161286.61

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2351 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 161286.61214026294
Starting timer for packet 10 at time 161286.61214026294

_____

EVENT time: 161288.641315958 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 161288.641315958
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent

_____

EVENT time: 161298.31995605322 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 161298.31995605322
Recieved ACK for last sent packet. Stopping Timer at
161298.31995605322
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 161300.84536271234 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161300.84536271234
generateNextArrival(): future time for event 1 at entity 0 will be
161544.94460890515
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2372 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161300.84536271234
Packet: 11 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 161300.85
Packet added to retransmission buffer at index [0]

Next sequence number: 12
_____

EVENT time: 161306.573747978 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 161330.84536271234 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 161330.85
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2372 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 161330.84536271234
Starting timer for packet 11 at time 161330.84536271234

_____

EVENT time: 161337.83886226983 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 161337.83886226983
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 161345.67146824536 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 161345.67146824536
Recieved ACK for last sent packet. Stopping Timer at
161345.67146824536
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 161544.94460890515 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161544.94460890515
generateNextArrival(): future time for event 1 at entity 0 will be
161645.8021790214
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2393 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161544.94460890515
Packet: 12 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 161544.94
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 161553.16064943373 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 161553.16064943373
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 161555.23184911633 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 161555.23184911633
Recieved ACK for last sent packet. Stopping Timer at
161555.23184911633
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 161645.8021790214 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161645.8021790214
generateNextArrival(): future time for event 1 at entity 0 will be

161701.23599963362
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2414 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161645.8021790214
Packet: 13 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 161645.80
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 161650.10834070848 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 161650.10834070848
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 161652.56022827828 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 161652.56022827828
Recieved ACK for last sent packet. Stopping Timer at
161652.56022827828
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 161701.23599963362 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161701.23599963362
generateNextArrival(): future time for event 1 at entity 0 will be
161777.21488082505
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14

NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2435 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161701.23599963362
Packet: 14 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 161701.24
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 161703.78237250875 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 161731.23599963362 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 161731.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2435 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 161731.23599963362
Starting timer for packet 14 at time 161731.23599963362

_____

EVENT time: 161732.64607684544 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 161732.64607684544
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 161737.79656361567 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received

stopTimer: stopping timer at 161737.79656361567
Recieved ACK for last sent packet. Stopping Timer at
161737.79656361567
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 161777.21488082505 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 161777.21488082505
generateNextArrival(): future time for event 1 at entity 0 will be
162047.16940824594
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2456 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 161777.21488082505
Packet: 15 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 161777.21
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 161781.2598345895 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 161781.2598345895
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 161788.3014007994 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 97.0
_____

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EVENT time: 161807.21488082505  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 161807.21
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15  acknum: 0  checksum: -2456  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 161807.21488082505
Starting timer for packet 15 at time 161807.21488082505

_____


EVENT time: 161814.19684438594  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 161814.19684438594
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____


EVENT time: 161818.92352061506  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 161818.92352061506
Recieved ACK for last sent packet. Stopping Timer at
161818.92352061506
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 162047.16940824594  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 162047.16940824594
generateNextArrival(): future time for event 1 at entity 0 will be
162421.60710470885
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -1941  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 162047.16940824594
```

Packet: 0 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 162047.17
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 162057.01312295892 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 162057.01312295892
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 162060.82021546052 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 162060.82021546052
Recieved ACK for last sent packet. Stopping Timer at
162060.82021546052
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 162421.60710470885 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 162421.60710470885
generateNextArrival(): future time for event 1 at entity 0 will be
162691.0977507857
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 162421.60710470885
Packet: 1 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 162421.61
Packet added to retransmission buffer at index [0]
Next sequence number: 2

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EVENT time: 162424.8198187199 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 162424.8198187199
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

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EVENT time: 162427.9105807671 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 98.0

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EVENT time: 162451.60710470885 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 162451.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -1962 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 162451.60710470885
Starting timer for packet 1 at time 162451.60710470885

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EVENT time: 162454.3586535232 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 162454.3586535232
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

————————————————————

EVENT time: 162461.71910763864 type: 2 entity: 0
aInput()_____

Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 162461.71910763864
Recieved ACK for last sent packet. Stopping Timer at
162461.71910763864
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 162691.0977507857 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 162691.0977507857
generateNextArrival(): future time for event 1 at entity 0 will be
163082.9676198613
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -1983 payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 162691.0977507857
Packet: 2 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 162691.10
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 162695.23773918865 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 162695.23773918865
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ccccccccccccccccccccc delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 162702.73003326502 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 162702.73003326502
Recieved ACK for last sent packet. Stopping Timer at

162702.73003326502
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 163082.9676198613 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163082.9676198613
generateNextArrival(): future time for event 1 at entity 0 will be
163282.461012604
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2004 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 163082.9676198613
Packet: 3 With Payload: dddddddddddddddddddd sent to B
Timer started at: 163082.97
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 163087.0831629382 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 163087.0831629382
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 163092.76348155143 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 163092.76348155143
Recieved ACK for last sent packet. Stopping Timer at
163092.76348155143
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

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EVENT time: 163282.461012604 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163282.461012604
generateNextArrival(): future time for event 1 at entity 0 will be
163573.0094302193
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being lost
startTimer: starting timer at 163282.461012604
Packet: 4 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 163282.46
Packet added to retransmission buffer at index [0]
Next sequence number: 5

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EVENT time: 163312.461012604 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 163312.46
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: −2025 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 163312.461012604
Starting timer for packet 4 at time 163312.461012604

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EVENT time: 163321.95699942 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 163321.95699942
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: −5 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

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EVENT time: 163326.8355662708  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 99.0

_____


EVENT time: 163342.461012604  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 163342.46
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4  acknum: 0  checksum: -2025  payload:
eeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 163342.461012604
Starting timer for packet 4 at time 163342.461012604

_____


EVENT time: 163349.48142948686  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 5      rcv_end: 12
Packet received is not corrupt. At time 163349.48142948686
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK4 Sent

_____


EVENT time: 163358.58134708687  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 163358.58134708687
Recieved ACK for last sent packet. Stopping Timer at
163358.58134708687
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 163573.0094302193  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163573.0094302193
generateNextArrival(): future time for event 1 at entity 0 will be
163579.08871730693
aOutput()_____
```

Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2046 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 163573.0094302193
Packet: 5 With Payload: ffffffffffffffffffff sent to B
Timer started at: 163573.01
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 163579.08871730693 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163579.08871730693
generateNextArrival(): future time for event 1 at entity 0 will be
163689.8709067048
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2067 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 163579.08871730693
startTimer: starting timer at 163579.08871730693
Packet: 6 With Payload: gggggggggggggggggggg sent to B
Timer started at: 163579.09
Packet added to retransmission buffer at index [1]
Next sequence number: 7

_____

EVENT time: 163579.55824457522 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 163579.55824457522
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being lost
In order ACK 5 Sent

_____

EVENT time: 163587.35129856245 type: 2 entity: 1
bInput() _____

Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 163587.35129856245
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ggggggggggggggggggggg delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 163594.29920346677 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Cumulative ACK 6received
stopTimer: stopping timer at 163594.29920346677
Recieved ACK for last sent packet. Stopping Timer at
163594.29920346677
Sliding window 2 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 163689.8709067048 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163689.8709067048
generateNextArrival(): future time for event 1 at entity 0 will be
163790.6918546097
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2088 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 163689.8709067048
Packet: 7 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 163689.87
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 163691.88085573888 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 163691.88085573888
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5

New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: −8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 163699.17346720773 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 163699.17346720773
Recieved ACK for last sent packet. Stopping Timer at
163699.17346720773
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 163790.6918546097 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 163790.6918546097
generateNextArrival(): future time for event 1 at entity 0 will be
164051.0757774589
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2109 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 163790.6918546097
Packet: 8 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 163790.69
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 163793.06793420197 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 163820.6918546097 type: 0 entity: 0
aTimerInterrup()_____

```
TIMEOUT!!! at: 163820.69
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8  acknum: 0  checksum: -2109  payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 163820.6918546097
Starting timer for packet 8 at time 163820.6918546097

_____


EVENT time: 163829.83846552923  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 163829.83846552923
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 9      rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____


EVENT time: 163831.6792199468  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 163831.6792199468
Recieved ACK for last sent packet. Stopping Timer at 163831.6792199468
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 164051.0757774589  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 164051.0757774589
generateNextArrival(): future time for event 1 at entity 0 will be
164306.12506485172
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2130  payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 164051.0757774589
Packet: 9 With Payload: jjjjjjjjjjjjjjjjjjj sent to B
```

```
Timer started at: 164051.08
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____


EVENT time: 164058.1552476576  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9      rcv_end: 0
Packet received is not corrupt. At time 164058.1552476576
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message jjjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 10      rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____


EVENT time: 164067.8509170811  type: 2  entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 164067.8509170811
Recieved ACK for last sent packet. Stopping Timer at 164067.8509170811
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 164306.12506485172  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 164306.12506485172
generateNextArrival(): future time for event 1 at entity 0 will be
164340.29358806103
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10  acknum: 0  checksum: -2151  payload:
kkkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 164306.12506485172
Packet: 10 With Payload: kkkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 164306.13
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____
```

EVENT time: 164310.67677846603 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 164310.67677846603
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 164312.96963408295 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 164312.96963408295
Recieved ACK for last sent packet. Stopping Timer at
164312.96963408295
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 164340.29358806103 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 164340.29358806103
generateNextArrival(): future time for event 1 at entity 0 will be
164608.95413068013
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2172 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 164340.29358806103
Packet: 11 With Payload: llllllllllllllllllll sent to B
Timer started at: 164340.29
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 164347.58455153037 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2

Packet received is not corrupt. At time 164347.58455153037
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 164355.70308542118 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 164355.70308542118
Recieved ACK for last sent packet. Stopping Timer at
164355.70308542118
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 164608.95413068013 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 164608.95413068013
generateNextArrival(): future time for event 1 at entity 0 will be
165008.64894558536
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2193 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 164608.95413068013
Packet: 12 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 164608.95
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 164618.55751213097 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 164618.55751213097
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 13   rcv_end = 4

toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent
_____

EVENT time: 164623.84093752847 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 164623.84093752847
Recieved ACK for last sent packet. Stopping Timer at
164623.84093752847
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 165008.64894558536 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 165008.64894558536
generateNextArrival(): future time for event 1 at entity 0 will be
165178.4539323098
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2214 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 165008.64894558536
Packet: 13 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 165008.65
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 165014.78768272942 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 165014.78768272942
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 165023.73818170704 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 165023.73818170704
Recieved ACK for last sent packet. Stopping Timer at
165023.73818170704
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 165178.4539323098 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 165178.4539323098
generateNextArrival(): future time for event 1 at entity 0 will be
165540.54994354062
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2235 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 165178.4539323098
Packet: 14 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 165178.45
Packet added to retransmission buffer at index [0]
Next sequence number: 15
_____

EVENT time: 165187.25885799725 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 165187.25885799725
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent
_____

EVENT time: 165195.83910641793 type: 2 entity: 0
aInput()_____

Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 165195.83910641793
Recieved ACK for last sent packet. Stopping Timer at
165195.83910641793
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 165540.54994354062 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 165540.54994354062
generateNextArrival(): future time for event 1 at entity 0 will be
165873.0674153873
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppppp
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 165540.54994354062
Packet: 15 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 165540.55
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 165541.73946348447 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 165570.54994354062 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 165570.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppppp
toLayer3: packet being lost
Retransmitting Packet 15
startTimer: starting timer at 165570.54994354062
Starting timer for packet 15 at time 165570.54994354062
_____

EVENT time: 165600.54994354062 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 165600.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2256 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 165600.54994354062
Starting timer for packet 15 at time 165600.54994354062

_____

EVENT time: 165606.60545670937 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 165606.60545670937
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 165609.9700613421 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 165609.9700613421
Recieved ACK for last sent packet. Stopping Timer at 165609.9700613421
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 165873.0674153873 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 165873.0674153873
generateNextArrival(): future time for event 1 at entity 0 will be
166015.601062044
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2261 payload:

qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 165873.0674153873
Packet: 0 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 165873.07
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 165882.65431684305 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 165882.65431684305
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 165889.36573381745 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 165889.36573381745
Recieved ACK for last sent packet. Stopping Timer at
165889.36573381745
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 166015.601062044 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 166015.601062044
generateNextArrival(): future time for event 1 at entity 0 will be
166114.20026245905
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2282 payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 166015.601062044
Packet: 1 With Payload: rrrrrrrrrrrrrrrrrrrrr sent to B

Timer started at: 166015.60
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 166017.27756584357 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 166017.27756584357
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 166022.04269539463 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 166022.04269539463
Recieved ACK for last sent packet. Stopping Timer at
166022.04269539463
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 166114.20026245905 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 166114.20026245905
generateNextArrival(): future time for event 1 at entity 0 will be
166233.4055604723
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2303 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 166114.20026245905
Packet: 2 With Payload: sssssssssssssssssssss sent to B
Timer started at: 166114.20
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 166123.4548173466 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 166123.4548173466
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 166126.88204596075 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 166126.88204596075
Recieved ACK for last sent packet. Stopping Timer at
166126.88204596075
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 166233.4055604723 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 166233.4055604723
generateNextArrival(): future time for event 1 at entity 0 will be
166241.21829889817
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2324 payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 166233.4055604723
Packet: 3 With Payload: tttttttttttttttttttt sent to B
Timer started at: 166233.41
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 166241.21829889817 type: 1 entity: 0
generateNextArrival(): called

generateNextArrival(): time is 166241.21829889817
generateNextArrival(): future time for event 1 at entity 0 will be
166379.96765037984
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2345 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 166241.21829889817
startTimer: starting timer at 166241.21829889817
Packet: 4 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 166241.22
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____

EVENT time: 166242.58238471622 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 166242.58238471622
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 166247.16568498785 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 100.0

_____

EVENT time: 166248.18744468509 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 166248.18744468509
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side

In order ACK 4 Sent
_____

EVENT time: 166251.96679586158 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Cumulative ACK 4received
stopTimer: stopping timer at 166251.96679586158
Recieved ACK for last sent packet. Stopping Timer at
166251.96679586158
Sliding window 2 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 166379.96765037984 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 166379.96765037984
generateNextArrival(): future time for event 1 at entity 0 will be
166707.4190496535
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2366 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 166379.96765037984
Packet: 5 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 166379.97
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 166389.88717307034 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 166389.88717307034
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

```
EVENT time: 166399.44276253536  type: 2  entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 166399.44276253536
Recieved ACK for last sent packet. Stopping Timer at
166399.44276253536
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 166707.4190496535  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 166707.4190496535
generateNextArrival(): future time for event 1 at entity 0 will be
167065.43778801832
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6  acknum: 0  checksum: -2387  payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 166707.4190496535
Packet: 6 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 166707.42
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____


EVENT time: 166715.1027863398  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6      rcv_end: 13
Packet received is not corrupt. At time 166715.1027863398
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 7     rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____


EVENT time: 166721.3920407726  type: 2  entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
```

stopTimer: stopping timer at 166721.3920407726
Recieved ACK for last sent packet. Stopping Timer at 166721.3920407726
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 167065.43778801832 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 167065.43778801832
generateNextArrival(): future time for event 1 at entity 0 will be
167442.92733542883
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2408 payload:
xxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 167065.43778801832
Packet: 7 With Payload: xxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 167065.44
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 167073.4426099428 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 167073.4426099428
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message xxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 167082.21704763928 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 167082.21704763928
Recieved ACK for last sent packet. Stopping Timer at
167082.21704763928
Sliding window 1 times
New send_base: 8 send_end: 15

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 167442.92733542883 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 167442.92733542883
generateNextArrival(): future time for event 1 at entity 0 will be
167815.3752250739
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2429 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 167442.92733542883
Packet: 8 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 167442.93
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 167450.7967467268 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 167450.7967467268
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 167454.910092471 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 167454.910092471
Recieved ACK for last sent packet. Stopping Timer at 167454.910092471
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 167815.3752250739 type: 1 entity: 0

generateNextArrival(): called
generateNextArrival(): time is 167815.3752250739
generateNextArrival(): future time for event 1 at entity 0 will be
168137.58964812147
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2450 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 167815.3752250739
Packet: 9 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 167815.38
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 167822.4596392711 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 167822.4596392711
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 167831.0860316781 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 167831.0860316781
Recieved ACK for last sent packet. Stopping Timer at 167831.0860316781
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 168137.58964812147 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 168137.58964812147
generateNextArrival(): future time for event 1 at entity 0 will be
168314.5481734671
aOutput()_____

Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 168137.58964812147
Packet: 10 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 168137.59
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 168142.33582567816 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 168142.33582567816
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: packet being lost
In order ACK 10 Sent
_____

EVENT time: 168167.58964812147 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 168167.59
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -1951 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 168167.58964812147
Starting timer for packet 10 at time 168167.58964812147
_____

EVENT time: 168168.97582934037 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 168168.97582934037
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent
_____

EVENT time: 168176.94357127586 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 168176.94357127586
Recieved ACK for last sent packet. Stopping Timer at
168176.94357127586
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 168314.5481734671 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 168314.5481734671
generateNextArrival(): future time for event 1 at entity 0 will be
168706.0640278328
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -1972 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 168314.5481734671
Packet: 11 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 168314.55
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 168320.59407330534 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 168320.59407330534
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 168322.36341441073 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received

stopTimer: stopping timer at 168322.36341441073
Recieved ACK for last sent packet. Stopping Timer at
168322.36341441073
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 168706.0640278328 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 168706.0640278328
generateNextArrival(): future time for event 1 at entity 0 will be
168945.10940885637
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 168706.0640278328
Packet: 12 With Payload: cccccccccccccccccccc sent to B
Timer started at: 168706.06
Packet added to retransmission buffer at index [0]
Next sequence number: 13
_____

EVENT time: 168710.50614947957 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 168736.0640278328 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 168736.06
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -1993 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 168736.0640278328
Starting timer for packet 12 at time 168736.0640278328
_____

```
EVENT time: 168740.3097628711  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is not corrupt. At time 168740.3097628711
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 13     rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____


EVENT time: 168743.7026581621  type: 2  entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 168743.7026581621
Recieved ACK for last sent packet. Stopping Timer at 168743.7026581621
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 168945.10940885637  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 168945.10940885637
generateNextArrival(): future time for event 1 at entity 0 will be
169202.61238441104
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2014  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 168945.10940885637
Packet: 13 With Payload: dddddddddddddddddddd sent to B
Timer started at: 168945.11
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 168952.34434034233  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is not corrupt. At time 168952.34434034233
Packet received is in order. Delivering packet(s) to layer5
```

Packet 13 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 168956.85677663493 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 168956.85677663493
Recieved ACK for last sent packet. Stopping Timer at
168956.85677663493
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 169202.61238441104 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 169202.61238441104
generateNextArrival(): future time for event 1 at entity 0 will be
169593.50566118342
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being lost
startTimer: starting timer at 169202.61238441104
Packet: 14 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 169202.61
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 169232.61238441104 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 169232.61
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2035 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 169232.61238441104

Starting timer for packet 14 at time 169232.61238441104
_____

EVENT time: 169235.25708792373 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 169235.25708792373
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message eeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 169244.39848017815 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 169244.39848017815
Recieved ACK for last sent packet. Stopping Timer at
169244.39848017815
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 169593.50566118342 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 169593.50566118342
generateNextArrival(): future time for event 1 at entity 0 will be
169865.4744102297
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2056 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 169593.50566118342
Packet: 15 With Payload: ffffffffffffffffffff sent to B
Timer started at: 169593.51
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 169597.68218024223 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 169597.68218024223
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 169606.67607654035 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 169606.67607654035
Recieved ACK for last sent packet. Stopping Timer at
169606.67607654035
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 169865.4744102297 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 169865.4744102297
generateNextArrival(): future time for event 1 at entity 0 will be
169984.04492324585
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2061 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 169865.4744102297
Packet: 0 With Payload: gggggggggggggggggggg sent to B
Timer started at: 169865.47
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 169874.80559709456 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 169874.80559709456

Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 169883.05130161435 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 169883.05130161435
Recieved ACK for last sent packet. Stopping Timer at
169883.05130161435
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 169984.04492324585 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 169984.04492324585
generateNextArrival(): future time for event 1 at entity 0 will be
170003.78429517493
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2082 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 169984.04492324585
Packet: 1 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 169984.04
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 169992.179113132 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 169992.179113132
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:

toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____

EVENT time: 169995.0528885768 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 169995.0528885768
Recieved ACK for last sent packet. Stopping Timer at 169995.0528885768
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 170003.78429517493 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 170003.78429517493
generateNextArrival(): future time for event 1 at entity 0 will be
170295.17502365177
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: −2103 payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 170003.78429517493
Packet: 2 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 170003.78
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 170012.67189550452 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 170012.67189550452
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: −3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 170019.20148319946   type: 2   entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 170019.20148319946
Recieved ACK for last sent packet. Stopping Timer at
170019.20148319946
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 170295.17502365177   type: 1   entity: 0
generateNextArrival(): called
generateNextArrival(): time is 170295.17502365177
generateNextArrival(): future time for event 1 at entity 0 will be
170406.18915372164
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: −2124 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 170295.17502365177
Packet: 3 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 170295.18
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 170298.44157231355   type: 2   entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 170298.44157231355
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 170303.85766167173   type: 2   entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10

Received Corrupted ACK
Number of Corruped Packets to A: 101.0
_____

EVENT time: 170325.17502365177 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 170325.18
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2124 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 170325.17502365177
Starting timer for packet 3 at time 170325.17502365177

_____

EVENT time: 170328.35230567332 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 170328.35230567332
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 170334.29081087673 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 170334.29081087673
Recieved ACK for last sent packet. Stopping Timer at
170334.29081087673
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 170406.18915372164 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 170406.18915372164
generateNextArrival(): future time for event 1 at entity 0 will be
170588.579973754
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window

toLayer3: seqnum: 4 acknum: 0 checksum: -2145 payload:
kkkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 170406.18915372164
Packet: 4 With Payload: kkkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 170406.19
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 170407.96041749313 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 170407.96041749313
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message kkkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 170412.65413373202 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 170412.65413373202
Recieved ACK for last sent packet. Stopping Timer at
170412.65413373202
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 170588.579973754 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 170588.579973754
generateNextArrival(): future time for event 1 at entity 0 will be
170860.56093020408
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2166 payload:
lllllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 170588.579973754

Packet: 5 With Payload: lllllllllllllllllll sent to B
Timer started at: 170588.58
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 170590.39600817888 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 170590.39600817888
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 170596.3979613635 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 170596.3979613635
Recieved ACK for last sent packet. Stopping Timer at 170596.3979613635
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 170860.56093020408 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 170860.56093020408
generateNextArrival(): future time for event 1 at entity 0 will be
171194.98275704205
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2187 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 170860.56093020408
Packet: 6 With Payload: mmmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 170860.56
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 170868.6492507705 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 170868.6492507705
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message mmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: packet being lost
In order ACK 6 Sent

_____

EVENT time: 170890.56093020408 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 170890.56
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: −2187 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 170890.56093020408
Starting timer for packet 6 at time 170890.56093020408

_____

EVENT time: 170897.62776573983 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 170897.62776573983
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK6 Sent

_____

EVENT time: 170902.09570604563 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 170902.09570604563
Recieved ACK for last sent packet. Stopping Timer at
170902.09570604563
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 171194.98275704205 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 171194.98275704205
generateNextArrival(): future time for event 1 at entity 0 will be
171344.36475722515
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being lost
startTimer: starting timer at 171194.98275704205
Packet: 7 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 171194.98
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 171224.98275704205 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 171224.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: packet being lost
Retransmitting Packet 7
startTimer: starting timer at 171224.98275704205
Starting timer for packet 7 at time 171224.98275704205

_____

EVENT time: 171254.98275704205 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 171254.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2208 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 171254.98275704205
Starting timer for packet 7 at time 171254.98275704205

_____

EVENT time: 171260.33155308684 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14

Packet received is not corrupt. At time 171260.33155308684
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 171267.17728202144 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 171267.17728202144
Recieved ACK for last sent packet. Stopping Timer at
171267.17728202144
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 171344.36475722515 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 171344.36475722515
generateNextArrival(): future time for event 1 at entity 0 will be
171715.4454176457
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2229 payload:
oooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 171344.36475722515
Packet: 8 With Payload: oooooooooooooooooooo sent to B
Timer started at: 171344.36
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 171346.5598315377 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 171346.5598315377
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message oooooooooooooooooooo delivered to Layer 5
New rcv_base = 9   rcv_end = 0

toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____

EVENT time: 171348.24979399994 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 171348.24979399994
Recieved ACK for last sent packet. Stopping Timer at
171348.24979399994
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 171715.4454176457 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 171715.4454176457
generateNextArrival(): future time for event 1 at entity 0 will be
172083.31553086938
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2250 payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 171715.4454176457
Packet: 9 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 171715.45
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____

EVENT time: 171724.06494338808 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 171724.06494338808
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: −10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent
_____

EVENT time: 171732.0933866389 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 171732.0933866389
Recieved ACK for last sent packet. Stopping Timer at 171732.0933866389
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 172083.31553086938 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172083.31553086938
generateNextArrival(): future time for event 1 at entity 0 will be
172276.08264412358
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172083.31553086938
Packet: 10 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 172083.32
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 172091.9996032593 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 172091.9996032593
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: packet being lost
In order ACK 10 Sent

_____

EVENT time: 172113.31553086938 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 172113.32

Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 172113.31553086938
Starting timer for packet 10 at time 172113.31553086938

_____

EVENT time: 172120.85369426548 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 172143.31553086938 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 172143.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10 acknum: 0 checksum: -2271 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 172143.31553086938
Starting timer for packet 10 at time 172143.31553086938

_____

EVENT time: 172146.93145542764 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 172146.93145542764
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK10 Sent

_____

EVENT time: 172154.26004821918 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 172154.26004821918
Recieved ACK for last sent packet. Stopping Timer at
172154.26004821918
Sliding window 1 times
New send_base: 11 send_end: 2

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 172276.08264412358 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172276.08264412358
generateNextArrival(): future time for event 1 at entity 0 will be
172498.87997070217
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2292 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172276.08264412358
Packet: 11 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 172276.08
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 172286.03650013727 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 172286.03650013727
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: −12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 172292.6913357951 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 172292.6913357951
Recieved ACK for last sent packet. Stopping Timer at 172292.6913357951
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 172498.87997070217 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 172498.87997070217
generateNextArrival(): future time for event 1 at entity 0 will be
172579.75402081356
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2313  payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172498.87997070217
Packet: 12 With Payload: ssssssssssssssssssss sent to B
Timer started at: 172498.88
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 172502.91915646833  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is not corrupt. At time 172502.91915646833
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 13     rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____


EVENT time: 172506.0700704977  type: 2  entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 172506.0700704977
Recieved ACK for last sent packet. Stopping Timer at 172506.0700704977
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 172579.75402081356  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172579.75402081356
generateNextArrival(): future time for event 1 at entity 0 will be
172682.14972380744
aOutput()_____
```

Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2334 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172579.75402081356
Packet: 13 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 172579.75
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 172588.18155461282 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 172588.18155461282
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 172597.24192022457 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 172597.24192022457
Recieved ACK for last sent packet. Stopping Timer at
172597.24192022457
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 172682.14972380744 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172682.14972380744
generateNextArrival(): future time for event 1 at entity 0 will be
172893.06924649794
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2355 payload:

uuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172682.14972380744
Packet: 14 With Payload: uuuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 172682.15
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 172687.8014770958 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 172687.8014770958
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message uuuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 172697.04449598677 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 172697.04449598677
Recieved ACK for last sent packet. Stopping Timer at
172697.04449598677
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 172893.06924649794 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172893.06924649794
generateNextArrival(): future time for event 1 at entity 0 will be
172956.9261757255
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2376 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172893.06924649794
Packet: 15 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B

```
Timer started at: 172893.07
Packet added to retransmission buffer at index [0]
Next sequence number: 0
————————————————————————————


EVENT time: 172900.69997253327  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15        rcv_end: 6
Packet received is not corrupt. At time 172900.69997253327
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 0      rcv_end = 7
toLayer3: seqnum: 0  acknum: 15  checksum: -16  payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

————————————————————————————


EVENT time: 172906.0616779076  type: 2  entity: 0
aInput()_____
Current Send_Base: 15    Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 172906.0616779076
Recieved ACK for last sent packet. Stopping Timer at 172906.0616779076
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

————————————————————————————


EVENT time: 172956.9261757255  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 172956.9261757255
generateNextArrival(): future time for event 1 at entity 0 will be
173253.285317545
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0  acknum: 0  checksum: -2381  payload:
wwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 172956.9261757255
Packet: 0 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 172956.93
Packet added to retransmission buffer at index [0]
Next sequence number: 1

————————————————————————————
```

EVENT time: 172962.13846247742 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 172962.13846247742
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 172968.5515915402 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 172968.5515915402
Recieved ACK for last sent packet. Stopping Timer at 172968.5515915402
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 173253.285317545 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 173253.285317545
generateNextArrival(): future time for event 1 at entity 0 will be
173340.18982512885
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 173253.285317545
Packet: 1 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 173253.29
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____

EVENT time: 173259.5825373088 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 173259.5825373088

Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 173266.18491164883 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 102.0

_____

EVENT time: 173283.285317545 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 173283.29
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2402 payload:
xxxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 173283.285317545
Starting timer for packet 1 at time 173283.285317545

_____

EVENT time: 173285.31257057397 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 173285.31257057397
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 173291.62709433262 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 173291.62709433262
Recieved ACK for last sent packet. Stopping Timer at
173291.62709433262
Sliding window 1 times
New send_base: 2 send_end: 9

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 173340.18982512885 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 173340.18982512885
generateNextArrival(): future time for event 1 at entity 0 will be
173439.92431409642
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2423 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 173340.18982512885
Packet: 2 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 173340.19
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 173343.26548051383 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 173343.26548051383
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 173349.73162022757 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 173349.73162022757
Recieved ACK for last sent packet. Stopping Timer at
173349.73162022757
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 173439.92431409642  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 173439.92431409642
generateNextArrival(): future time for event 1 at entity 0 will be
173786.88314462715
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3  acknum: 0  checksum: -2444  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 173439.92431409642
Packet: 3 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 173439.92
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____


EVENT time: 173445.38270210876  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3      rcv_end: 10
Packet received is not corrupt. At time 173445.38270210876
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 4     rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____


EVENT time: 173454.13626514474  type: 2  entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 103.0

_____


EVENT time: 173469.92431409642  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 173469.92
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3  acknum: 0  checksum: -2444  payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
```

startTimer: starting timer at 173469.92431409642
Starting timer for packet 3 at time 173469.92431409642
_____

EVENT time: 173475.85100863667 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 173475.85100863667
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 173480.91222876668 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 173480.91222876668
Recieved ACK for last sent packet. Stopping Timer at
173480.91222876668
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 173786.88314462715 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 173786.88314462715
generateNextArrival(): future time for event 1 at entity 0 will be
174093.35001678512
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1945 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 173786.88314462715
Packet: 4 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 173786.88
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 173791.11844233522 type: 2 entity: 1

```
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 173816.88314462715  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 173816.88
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4  acknum: 0  checksum: -1945  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 173816.88314462715
Starting timer for packet 4 at time 173816.88314462715

_____


EVENT time: 173824.38230536814  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 173824.38230536814
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 5      rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____


EVENT time: 173833.1921750541  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 173833.1921750541
Recieved ACK for last sent packet. Stopping Timer at 173833.1921750541
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 174093.35001678512  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174093.35001678512
generateNextArrival(): future time for event 1 at entity 0 will be
174229.0353099154
aOutput()_____
```

Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -1966 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174093.35001678512
Packet: 5 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 174093.35
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 174097.34635456398 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 174097.34635456398
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 174099.26071962639 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 174099.26071962639
Recieved ACK for last sent packet. Stopping Timer at
174099.26071962639
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174229.0353099154 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174229.0353099154
generateNextArrival(): future time for event 1 at entity 0 will be
174337.51029999688
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -1987 payload:

cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174229.0353099154
Packet: 6 With Payload: cccccccccccccccccccc sent to B
Timer started at: 174229.04
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 174235.09356975 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 174235.09356975
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 174236.8436841944 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 174236.8436841944
Recieved ACK for last sent packet. Stopping Timer at 174236.8436841944
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174337.51029999688 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174337.51029999688
generateNextArrival(): future time for event 1 at entity 0 will be
174501.07730338443
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2008 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174337.51029999688
Packet: 7 With Payload: dddddddddddddddddddd sent to B
Timer started at: 174337.51

```
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 174341.48164311648  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7       rcv_end: 14
Packet received is not corrupt. At time 174341.48164311648
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 8     rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 174343.8082827234  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 174343.8082827234
Recieved ACK for last sent packet. Stopping Timer at 174343.8082827234
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 174501.07730338443  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174501.07730338443
generateNextArrival(): future time for event 1 at entity 0 will be
174642.93954283267
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2029  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174501.07730338443
Packet: 8 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 174501.08
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____
```

EVENT time: 174510.46314889973 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is corrupted. Discarding and ignoring packet
_____

EVENT time: 174531.07730338443 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 174531.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 8 acknum: 0 checksum: -2029 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 8
startTimer: starting timer at 174531.07730338443
Starting timer for packet 8 at time 174531.07730338443

_____

EVENT time: 174534.95663319796 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 174534.95663319796
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 174539.5577867976 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 174539.5577867976
Recieved ACK for last sent packet. Stopping Timer at 174539.5577867976
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174642.93954283267 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174642.93954283267
generateNextArrival(): future time for event 1 at entity 0 will be

174694.80880153808
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2050 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174642.93954283267
Packet: 9 With Payload: ffffffffffffffffffff sent to B
Timer started at: 174642.94
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 174647.29981383705 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 174647.29981383705
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 174654.30018005916 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 174654.30018005916
Recieved ACK for last sent packet. Stopping Timer at
174654.30018005916
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174694.80880153808 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174694.80880153808
generateNextArrival(): future time for event 1 at entity 0 will be
174806.4210943937
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10

NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2071 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174694.80880153808
Packet: 10 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 174694.81
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 174700.35508285768 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 174700.35508285768
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 174702.0433973204 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 174702.0433973204
Recieved ACK for last sent packet. Stopping Timer at 174702.0433973204
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174806.4210943937 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174806.4210943937
generateNextArrival(): future time for event 1 at entity 0 will be
174822.04657124542
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2092 payload:
hhhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174806.4210943937

Packet: 11 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 174806.42
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 174813.34263130583 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 174813.34263130583
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 174816.81545457314 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 174816.81545457314
Recieved ACK for last sent packet. Stopping Timer at
174816.81545457314
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174822.04657124542 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174822.04657124542
generateNextArrival(): future time for event 1 at entity 0 will be
174892.77626880698
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2113 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174822.04657124542
Packet: 12 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 174822.05
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 174829.1337321085 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 174829.1337321085
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____

EVENT time: 174852.04657124542 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 174852.05
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2113 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 174852.04657124542
Starting timer for packet 12 at time 174852.04657124542

_____

EVENT time: 174860.71663563946 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 174860.71663563946
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____

EVENT time: 174863.1325418866 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 174863.1325418866
Recieved ACK for last sent packet. Stopping Timer at 174863.1325418866
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 174892.77626880698 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 174892.77626880698
generateNextArrival(): future time for event 1 at entity 0 will be
175092.892239143
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2134 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 174892.77626880698
Packet: 13 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 174892.78
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 174896.53144932396 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 174896.53144932396
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 174900.88677632977 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 174900.88677632977
Recieved ACK for last sent packet. Stopping Timer at
174900.88677632977
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 175092.892239143 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 175092.892239143

generateNextArrival(): future time for event 1 at entity 0 will be
175341.00772118286
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2155 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 175092.892239143
Packet: 14 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 175092.89
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 175100.34003723253 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 175100.34003723253
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 175104.93624683365 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 175104.93624683365
Recieved ACK for last sent packet. Stopping Timer at
175104.93624683365
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 175341.00772118286 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 175341.00772118286
generateNextArrival(): future time for event 1 at entity 0 will be
175355.24155400245
aOutput()_____
Send_Base: 15 Send_end: 6

NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
llllllllllllllllllll
toLayer3: packet being lost
startTimer: starting timer at 175341.00772118286
Packet: 15 With Payload: llllllllllllllllllll sent to B
Timer started at: 175341.01
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 175355.24155400245 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 175355.24155400245
generateNextArrival(): future time for event 1 at entity 0 will be
175645.97308267458
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2181 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 175355.24155400245
startTimer: starting timer at 175355.24155400245
Packet: 0 With Payload: mmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 175355.24
Packet added to retransmission buffer at index [1]
Next sequence number: 1

_____

EVENT time: 175364.56340220338 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 175364.56340220338
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Duplicate ACK 14 Sent

_____

EVENT time: 175374.16101565593 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK

Number of Corruped Packets to A: 104.0
_____

EVENT time: 175385.24155400245 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 175385.24
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2176 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
toLayer3: seqnum: 0 acknum: 0 checksum: -2181 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 175385.24155400245
Starting timer for packet 0 at time 175385.24155400245

_____

EVENT time: 175393.57158116394 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 175393.57158116394
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message llllllllllllllllllll delivered to Layer 5
Packet 0 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 0 Sent

_____

EVENT time: 175398.16064943385 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Cumulative ACK 0received
stopTimer: stopping timer at 175398.16064943385
Recieved ACK for last sent packet. Stopping Timer at
175398.16064943385
Sliding window 2 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 175401.689291055 type: 2 entity: 1
bInput() _____

```
Packet 0 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 175401.689291055
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: packet being lost
Packet received is outside of window. ACK0 Sent
_____


EVENT time: 175645.97308267458  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 175645.97308267458
generateNextArrival(): future time for event 1 at entity 0 will be
175899.28891872914
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2202  payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 175645.97308267458
Packet: 1 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 175645.97
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____


EVENT time: 175648.74660481577  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 175648.74660481577
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 2      rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent
_____


EVENT time: 175656.04443494976  type: 2  entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 175656.04443494976
Recieved ACK for last sent packet. Stopping Timer at
175656.04443494976
Sliding window 1 times
New send_base: 2 send_end: 9
```

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 175899.28891872914 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 175899.28891872914
generateNextArrival(): future time for event 1 at entity 0 will be
176049.74517044582
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 175899.28891872914
Packet: 2 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 175899.29
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 175905.93523972284 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 175905.93523972284
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 175913.51872310552 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK
Number of Corruped Packets to A: 105.0

_____

EVENT time: 175929.28891872914 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 175929.29
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 2 acknum: 0 checksum: -2223 payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 175929.28891872914
Starting timer for packet 2 at time 175929.28891872914

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EVENT time: 175939.2056947538 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 175939.2056947538
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

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EVENT time: 175941.52162236389 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 175941.52162236389
Recieved ACK for last sent packet. Stopping Timer at
175941.52162236389
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

———————————————————————————————

EVENT time: 176049.74517044582 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 176049.74517044582
generateNextArrival(): future time for event 1 at entity 0 will be
176421.22867519144
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2244 payload:
pppppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 176049.74517044582
Packet: 3 With Payload: pppppppppppppppppppppp sent to B
Timer started at: 176049.75
Packet added to retransmission buffer at index [0]
Next sequence number: 4

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EVENT time: 176052.61070589308 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 176052.61070589308
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message pppppppppppppppppppppp delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 176054.93597216706 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 176054.93597216706
Recieved ACK for last sent packet. Stopping Timer at
176054.93597216706
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 176421.22867519144 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 176421.22867519144
generateNextArrival(): future time for event 1 at entity 0 will be
176575.77440717787
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2265 payload:
qqqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 176421.22867519144
Packet: 4 With Payload: qqqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 176421.23
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 176426.84829248933 type: 2 entity: 1
bInput() _____

Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 176426.84829248933
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message qqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 176436.7576525162 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 176436.7576525162
Recieved ACK for last sent packet. Stopping Timer at 176436.7576525162
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 176575.77440717787 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 176575.77440717787
generateNextArrival(): future time for event 1 at entity 0 will be
176877.02871791733
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2286 payload:
rrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 176575.77440717787
Packet: 5 With Payload: rrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 176575.77
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 176577.99530014946 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 176577.99530014946
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message rrrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 6   rcv_end = 13

toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 176584.89568773453 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 176584.89568773453
Recieved ACK for last sent packet. Stopping Timer at
176584.89568773453
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 176877.02871791733 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 176877.02871791733
generateNextArrival(): future time for event 1 at entity 0 will be
176878.05413983573
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2307 payload:
sssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 176877.02871791733
Packet: 6 With Payload: sssssssssssssssssssss sent to B
Timer started at: 176877.03
Packet added to retransmission buffer at index [0]
Next sequence number: 7
_____

EVENT time: 176878.05413983573 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 176878.05413983573
generateNextArrival(): future time for event 1 at entity 0 will be
177150.62105166775
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2328 payload:
tttttttttttttttttttt

toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 176878.05413983573
startTimer: starting timer at 176878.05413983573
Packet: 7 With Payload: tttttttttttttttttttt sent to B
Timer started at: 176878.05
Packet added to retransmission buffer at index [1]
Next sequence number: 8
_____

EVENT time: 176884.2779320657 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 176884.2779320657
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 176889.02713095484 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 176893.9961241492 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 176893.9961241492
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 176898.67940305787 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received

stopTimer: stopping timer at 176898.67940305787
Recieved ACK for last sent packet. Stopping Timer at
176898.67940305787
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 177150.62105166775 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177150.62105166775
generateNextArrival(): future time for event 1 at entity 0 will be
177217.10257271025
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2349 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177150.62105166775
Packet: 8 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 177150.62
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 177154.5987121188 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 177154.5987121188
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 177155.85689870897 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 177155.85689870897
Recieved ACK for last sent packet. Stopping Timer at
177155.85689870897
Sliding window 1 times

New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 177217.10257271025 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177217.10257271025
generateNextArrival(): future time for event 1 at entity 0 will be
177525.41276284057
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2370 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177217.10257271025
Packet: 9 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 177217.10
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 177221.9391155735 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 177221.9391155735
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____

EVENT time: 177247.10257271025 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 177247.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2370 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 177247.10257271025
Starting timer for packet 9 at time 177247.10257271025

_____

```
EVENT time: 177248.78759117395  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 177248.78759117395
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: packet being lost
Packet received is outside of window. ACK9 Sent

_____


EVENT time: 177277.10257271025  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 177277.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9  acknum: 0  checksum: -2370  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 177277.10257271025
Starting timer for packet 9 at time 177277.10257271025

_____


EVENT time: 177284.32953886522  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 177284.32953886522
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____


EVENT time: 177285.92996002064  type: 2  entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 177285.92996002064
Recieved ACK for last sent packet. Stopping Timer at
177285.92996002064
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 177525.41276284057  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177525.41276284057
```

```
generateNextArrival(): future time for event 1 at entity 0 will be
177578.7713248084
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10  acknum: 0  checksum: -2391  payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177525.41276284057
Packet: 10 With Payload: wwwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 177525.41
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____


EVENT time: 177529.65904721204  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10      rcv_end: 1
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 177555.41276284057  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 177555.41
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 10  acknum: 0  checksum: -2391  payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 10
startTimer: starting timer at 177555.41276284057
Starting timer for packet 10 at time 177555.41276284057

_____


EVENT time: 177564.9065523239  type: 2  entity: 1
bInput() _____
Packet 10 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 177564.9065523239
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message wwwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 11      rcv_end = 2
toLayer3: seqnum: 0  acknum: 10  checksum: -11  payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____
```

```
EVENT time: 177574.52339243743  type: 2  entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 177574.52339243743
Recieved ACK for last sent packet. Stopping Timer at
177574.52339243743
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 177578.7713248084  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177578.7713248084
generateNextArrival(): future time for event 1 at entity 0 will be
177794.86678670603
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11  acknum: 0  checksum: -2412  payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177578.7713248084
Packet: 11 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 177578.77
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____


EVENT time: 177584.95702993855  type: 2  entity: 1
bInput() _____
Packet 11 received. rcv_base: 11      rcv_end: 2
Packet received is not corrupt. At time 177584.95702993855
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 12     rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 177588.2200079347  type: 2  entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
```

Expected ACK 11 received
stopTimer: stopping timer at 177588.2200079347
Recieved ACK for last sent packet. Stopping Timer at 177588.2200079347
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 177794.86678670603 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177794.86678670603
generateNextArrival(): future time for event 1 at entity 0 will be
177982.60444959858
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2433 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177794.86678670603
Packet: 12 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 177794.87
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 177804.63881344025 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 177804.63881344025
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 177808.65465254668 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 177808.65465254668
Recieved ACK for last sent packet. Stopping Timer at
177808.65465254668
Sliding window 1 times

New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 177982.60444959858 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 177982.60444959858
generateNextArrival(): future time for event 1 at entity 0 will be
178090.5301065095
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2454 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 177982.60444959858
Packet: 13 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 177982.60
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 177985.104953154 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 177985.104953154
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 177987.40110476993 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 177987.40110476993
Recieved ACK for last sent packet. Stopping Timer at
177987.40110476993
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 178090.5301065095  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 178090.5301065095
generateNextArrival(): future time for event 1 at entity 0 will be
178346.26300851456
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14  acknum: 0  checksum: -1955  payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 178090.5301065095
Packet: 14 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 178090.53
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____


EVENT time: 178096.31836909076  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14       rcv_end: 5
Packet received is not corrupt. At time 178096.31836909076
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 15     rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 178099.10068056267  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 178099.10068056267
Recieved ACK for last sent packet. Stopping Timer at
178099.10068056267
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 178346.26300851456  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 178346.26300851456
```

generateNextArrival(): future time for event 1 at entity 0 will be
178655.90380565805
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -1976 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 178346.26300851456
Packet: 15 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 178346.26
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 178351.09213538002 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 178351.09213538002
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 178356.87710196225 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 178356.87710196225
Recieved ACK for last sent packet. Stopping Timer at
178356.87710196225
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 178655.90380565805 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 178655.90380565805
generateNextArrival(): future time for event 1 at entity 0 will be
178943.60789819018
aOutput()_____
Send_Base: 0 Send_end: 7

NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
ccccccccccccccccccccc
toLayer3: packet being lost
startTimer: starting timer at 178655.90380565805
Packet: 0 With Payload: ccccccccccccccccccccc sent to B
Timer started at: 178655.90
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____

EVENT time: 178685.90380565805 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 178685.90
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -1981 payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 178685.90380565805
Starting timer for packet 0 at time 178685.90380565805
_____

EVENT time: 178695.84777367464 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 178695.84777367464
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ccccccccccccccccccccc delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent
_____

EVENT time: 178697.6434827722 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 178697.6434827722
Recieved ACK for last sent packet. Stopping Timer at 178697.6434827722
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

```
EVENT time: 178943.60789819018  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 178943.60789819018
generateNextArrival(): future time for event 1 at entity 0 will be
179264.99221778
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2002  payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 178943.60789819018
Packet: 1 With Payload: dddddddddddddddddddd sent to B
Timer started at: 178943.61
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____


EVENT time: 178945.4049806207  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1       rcv_end: 8
Packet received is not corrupt. At time 178945.4049806207
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____


EVENT time: 178952.1554002502  type: 2  entity: 0
aInput()_____
Current Send_Base: 1    Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 178952.1554002502
Recieved ACK for last sent packet. Stopping Timer at 178952.1554002502
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 179264.99221778  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 179264.99221778
generateNextArrival(): future time for event 1 at entity 0 will be
```

179479.56175420384
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2023 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 179264.99221778
Packet: 2 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 179264.99
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 179274.75737784957 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 179274.75737784957
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 179284.122623371 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 179284.122623371
Recieved ACK for last sent packet. Stopping Timer at 179284.122623371
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 179479.56175420384 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 179479.56175420384
generateNextArrival(): future time for event 1 at entity 0 will be
179487.98486281923
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window

toLayer3: seqnum: 3 acknum: 0 checksum: −2044 payload:
ffffffffffffffffffff
toLayer3: packet being lost
startTimer: starting timer at 179479.56175420384
Packet: 3 With Payload: ffffffffffffffffffff sent to B
Timer started at: 179479.56
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 179487.98486281923 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 179487.98486281923
generateNextArrival(): future time for event 1 at entity 0 will be
179566.80806909382
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2065 payload:
gggggggggggggggggggg
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 179487.98486281923
startTimer: starting timer at 179487.98486281923
Packet: 4 With Payload: gggggggggggggggggggg sent to B
Timer started at: 179487.98
Packet added to retransmission buffer at index [1]
Next sequence number: 5

_____

EVENT time: 179497.91784417242 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 3   rcv_end: 10
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 179517.98486281923 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 179517.98
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: −2044 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
toLayer3: seqnum: 4 acknum: 0 checksum: −2065 payload:
gggggggggggggggggggg

```
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 179517.98486281923
Starting timer for packet 4 at time 179517.98486281923
_____


EVENT time: 179524.8234504226  type: 2  entity: 1
bInput() _____
Packet 3 received. rcv_base: 3      rcv_end: 10
Packet received is not corrupt. At time 179524.8234504226
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 4      rcv_end = 11
toLayer3: seqnum: 0  acknum: 3  checksum: -4  payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____


EVENT time: 179528.43964964745  type: 2  entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 179529.15872676772  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 179529.15872676772
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 5      rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____


EVENT time: 179537.11713003932  type: 2  entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 179537.11713003932
Recieved ACK for last sent packet. Stopping Timer at
179537.11713003932
```

Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 179566.80806909382 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 179566.80806909382
generateNextArrival(): future time for event 1 at entity 0 will be
179954.93026520577
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2086 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 179566.80806909382
Packet: 5 With Payload: hhhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 179566.81
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 179572.00360118403 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 179572.00360118403
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message hhhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 179581.6306039612 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 179581.6306039612
Recieved ACK for last sent packet. Stopping Timer at 179581.6306039612
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 179954.93026520577 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 179954.93026520577
generateNextArrival(): future time for event 1 at entity 0 will be
180290.19440290527
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2107 payload:
iiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 179954.93026520577
Packet: 6 With Payload: iiiiiiiiiiiiiiiiiii sent to B
Timer started at: 179954.93
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 179956.3735770744 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 179956.3735770744
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message iiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 179964.40531632426 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 179964.40531632426
Recieved ACK for last sent packet. Stopping Timer at
179964.40531632426
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 180290.19440290527 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 180290.19440290527

generateNextArrival(): future time for event 1 at entity 0 will be
180474.57502975545
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2128 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 180290.19440290527
Packet: 7 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 180290.19
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 180292.21753593546 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 180292.21753593546
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 180299.92736594737 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 180299.92736594737
Recieved ACK for last sent packet. Stopping Timer at
180299.92736594737
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 180474.57502975545 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 180474.57502975545
generateNextArrival(): future time for event 1 at entity 0 will be
180847.2914822839
aOutput()_____
Send_Base: 8 Send_end: 15

NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −2149 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 180474.57502975545
Packet: 8 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 180474.58
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____

EVENT time: 180478.20139164393 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 180478.20139164393
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 180480.8628498183 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 180480.8628498183
Recieved ACK for last sent packet. Stopping Timer at 180480.8628498183
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 180847.2914822839 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 180847.2914822839
generateNextArrival(): future time for event 1 at entity 0 will be
180942.74117252103
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: −2170 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side

startTimer: starting timer at 180847.2914822839
Packet: 9 With Payload: llllllllllllllllllll sent to B
Timer started at: 180847.29
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 180851.44520401614 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 180851.44520401614
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 180859.74364452032 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 180859.74364452032
Recieved ACK for last sent packet. Stopping Timer at
180859.74364452032
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 180942.74117252103 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 180942.74117252103
generateNextArrival(): future time for event 1 at entity 0 will be
181320.46266060355
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2191 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
startTimer: starting timer at 180942.74117252103
Packet: 10 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 180942.74
Packet added to retransmission buffer at index [0]

Next sequence number: 11
_____

EVENT time: 180950.942381054 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 180950.942381054
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message mmmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 180958.4503311257 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 180958.4503311257
Recieved ACK for last sent packet. Stopping Timer at 180958.4503311257
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 181320.46266060355 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 181320.46266060355
generateNextArrival(): future time for event 1 at entity 0 will be
181533.70159001424
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2212 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 181320.46266060355
Packet: 11 With Payload: nnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 181320.46
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 181326.95242164363 type: 2 entity: 1

```
bInput() _____
Packet 11 received. rcv_base: 11        rcv_end: 2
Packet received is not corrupt. At time 181326.95242164363
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 12       rcv_end = 3
toLayer3: seqnum: 0  acknum: 11  checksum: -12  payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____


EVENT time: 181335.5642567216  type: 2  entity: 0
aInput()_____
Current Send_Base: 11    Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 181335.5642567216
Recieved ACK for last sent packet. Stopping Timer at 181335.5642567216
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 181533.70159001424  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 181533.70159001424
generateNextArrival(): future time for event 1 at entity 0 will be
181928.35474715405
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2233  payload:
oooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 181533.70159001424
Packet: 12 With Payload: oooooooooooooooooooooo sent to B
Timer started at: 181533.70
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 181543.38270210873  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12        rcv_end: 3
Packet received is not corrupt. At time 181543.38270210873
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message oooooooooooooooooooooo delivered to Layer 5
```

New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 181545.17346720776 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 181545.17346720776
Recieved ACK for last sent packet. Stopping Timer at
181545.17346720776
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 181928.35474715405 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 181928.35474715405
generateNextArrival(): future time for event 1 at entity 0 will be
182323.25205236967
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:
pppppppppppppppppppp
toLayer3: packet being lost
startTimer: starting timer at 181928.35474715405
Packet: 13 With Payload: pppppppppppppppppppp sent to B
Timer started at: 181928.35
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____

EVENT time: 181958.35474715405 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 181958.35
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2254 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 181958.35474715405
Starting timer for packet 13 at time 181958.35474715405

———————————————————————

EVENT time: 181967.01052888567 type: 2 entity: 1
bInput() ————————————————————————
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 181967.01052888567
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

———————————————————————

EVENT time: 181969.0234992522 type: 2 entity: 0
aInput()————————————————————————
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 181969.0234992522
Recieved ACK for last sent packet. Stopping Timer at 181969.0234992522
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

———————————————————————

EVENT time: 182323.25205236967 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 182323.25205236967
generateNextArrival(): future time for event 1 at entity 0 will be
182587.62779625834
aOutput()————————————————————————
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2275 payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 182323.25205236967
Packet: 14 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 182323.25
Packet added to retransmission buffer at index [0]
Next sequence number: 15

———————————————————————

EVENT time: 182328.4734031189 type: 2 entity: 1
bInput() ————————————————————————

Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 182328.4734031189
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message qqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 182332.99984740737 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 182332.99984740737
Recieved ACK for last sent packet. Stopping Timer at
182332.99984740737
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 182587.62779625834 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 182587.62779625834
generateNextArrival(): future time for event 1 at entity 0 will be
182754.6494949186
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2296 payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 182587.62779625834
Packet: 15 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 182587.63
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____

EVENT time: 182592.32728049552 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 182592.32728049552
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5

New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 182593.721701712 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 182593.721701712
Recieved ACK for last sent packet. Stopping Timer at 182593.721701712
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 182754.6494949186 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 182754.6494949186
generateNextArrival(): future time for event 1 at entity 0 will be
183148.97305215604
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: packet being lost
startTimer: starting timer at 182754.6494949186
Packet: 0 With Payload: ssssssssssssssssssss sent to B
Timer started at: 182754.65
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 182784.6494949186 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 182784.65
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 0 acknum: 0 checksum: -2301 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 182784.6494949186
Starting timer for packet 0 at time 182784.6494949186

_____

```
EVENT time: 182790.9703360087  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 182790.9703360087
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 182798.27723014  type: 2  entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 182798.27723014
Recieved ACK for last sent packet. Stopping Timer at 182798.27723014
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 183148.97305215604  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 183148.97305215604
generateNextArrival(): future time for event 1 at entity 0 will be
183441.73100985738
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2322  payload:
tttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 183148.97305215604
Packet: 1 With Payload: tttttttttttttttttttt sent to B
Timer started at: 183148.97
Packet added to retransmission buffer at index [0]
Next sequence number: 2

_____


EVENT time: 183154.1641895809  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
```

Packet received is not corrupt. At time 183154.1641895809
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ttttttttttttttttttt delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 183156.94567705304 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 183156.94567705304
Recieved ACK for last sent packet. Stopping Timer at
183156.94567705304
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 183441.73100985738 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 183441.73100985738
generateNextArrival(): future time for event 1 at entity 0 will be
183619.69054231382
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 183441.73100985738
Packet: 2 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 183441.73
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 183446.88506729322 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 183446.88506729322
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 3   rcv_end = 10

toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 183448.72829371004 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Received Corrupted ACK
Number of Corruped Packets to A: 106.0

_____

EVENT time: 183471.73100985738 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 183471.73
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2343 payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 183471.73100985738
Starting timer for packet 2 at time 183471.73100985738

_____

EVENT time: 183474.29386272765 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 183474.29386272765
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 183482.41569261748 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 183482.41569261748
Recieved ACK for last sent packet. Stopping Timer at
183482.41569261748
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 183619.69054231382 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 183619.69054231382
generateNextArrival(): future time for event 1 at entity 0 will be
184019.25107577737
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
startTimer: starting timer at 183619.69054231382
Packet: 3 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 183619.69
Packet added to retransmission buffer at index [0]
Next sequence number: 4
_____

EVENT time: 183621.81859797958 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 183621.81859797958
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message vvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being lost
In order ACK 3 Sent

_____

EVENT time: 183649.69054231382 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 183649.69
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 183649.69054231382
Starting timer for packet 3 at time 183649.69054231382
_____

EVENT time: 183652.68379772324 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11

Packet received is not corrupt. At time 183652.68379772324
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent
_____

EVENT time: 183654.71544541756 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Received Corrupted ACK
Number of Corruped Packets to A: 107.0

_____

EVENT time: 183679.69054231382 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 183679.69
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 3 acknum: 0 checksum: -2364 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 3
startTimer: starting timer at 183679.69054231382
Starting timer for packet 3 at time 183679.69054231382

_____

EVENT time: 183685.4186529129 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 183685.4186529129
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK3 Sent

_____

EVENT time: 183693.17709891038 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 183693.17709891038
Recieved ACK for last sent packet. Stopping Timer at
183693.17709891038
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 184019.25107577737 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184019.25107577737
generateNextArrival(): future time for event 1 at entity 0 will be
184109.34171575052
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: packet being lost
startTimer: starting timer at 184019.25107577737
Packet: 4 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 184019.25
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 184049.25107577737 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 184049.25
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2385 payload:
wwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 184049.25107577737
Starting timer for packet 4 at time 184049.25107577737

_____

EVENT time: 184057.73931089198 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 184057.73931089198
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 184059.69020661022 type: 2 entity: 0
aInput()_____

Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 184059.69020661022
Recieved ACK for last sent packet. Stopping Timer at
184059.69020661022
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 184109.34171575052 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184109.34171575052
generateNextArrival(): future time for event 1 at entity 0 will be
184111.73436689345
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2406 payload:
xxxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 184109.34171575052
Packet: 5 With Payload: xxxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 184109.34
Packet added to retransmission buffer at index [0]
Next sequence number: 6
_____

EVENT time: 184111.73436689345 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184111.73436689345
generateNextArrival(): future time for event 1 at entity 0 will be
184498.44050416572
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2427 payload:
yyyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 184111.73436689345
startTimer: starting timer at 184111.73436689345
Packet: 6 With Payload: yyyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 184111.73
Packet added to retransmission buffer at index [1]
Next sequence number: 7
_____

```
EVENT time: 184118.6869106112  type: 2  entity: 1
bInput() _____
Packet 5 received. rcv_base: 5      rcv_end: 12
Packet received is not corrupt. At time 184118.6869106112
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 6     rcv_end = 13
toLayer3: seqnum: 0  acknum: 5  checksum: -6  payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____


EVENT time: 184121.76558732864  type: 2  entity: 0
aInput()_____
Current Send_Base: 5    Send_end: 12
Expected ACK 5 received
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 184127.14328440191  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6      rcv_end: 13
Packet received is not corrupt. At time 184127.14328440191
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 7     rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____


EVENT time: 184137.07516708877  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 184137.07516708877
Recieved ACK for last sent packet. Stopping Timer at
184137.07516708877
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____
```

```
EVENT time: 184498.44050416572  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184498.44050416572
generateNextArrival(): future time for event 1 at entity 0 will be
184710.9103671376
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2448  payload:
zzzzzzzzzzzzzzzzzzz
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 184498.44050416572
Packet: 7 With Payload: zzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 184498.44
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____


EVENT time: 184507.74806970422  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 184528.44050416572  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 184528.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2448  payload:
zzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 184528.44050416572
Starting timer for packet 7 at time 184528.44050416572
_____


EVENT time: 184535.7625049592  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7      rcv_end: 14
Packet received is not corrupt. At time 184535.7625049592
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message zzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 8      rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
```

toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 184538.08612323366 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 184538.08612323366
Recieved ACK for last sent packet. Stopping Timer at
184538.08612323366
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 184710.9103671376 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184710.9103671376
generateNextArrival(): future time for event 1 at entity 0 will be
184795.3245643482
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: −1949 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 184710.9103671376
Packet: 8 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 184710.91
Packet added to retransmission buffer at index [0]
Next sequence number: 9

_____

EVENT time: 184716.49180578016 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 184716.49180578016
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: −9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 184725.24921414832 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 184725.24921414832
Recieved ACK for last sent packet. Stopping Timer at
184725.24921414832
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 184795.3245643482 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 184795.3245643482
generateNextArrival(): future time for event 1 at entity 0 will be
185141.13589892263
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -1970 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 184795.3245643482
Packet: 9 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 184795.32
Packet added to retransmission buffer at index [0]
Next sequence number: 10

_____

EVENT time: 184798.86165959647 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 184798.86165959647
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____

EVENT time: 184808.59303567605 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0

Expected ACK 9 received
stopTimer: stopping timer at 184808.59303567605
Recieved ACK for last sent packet. Stopping Timer at
184808.59303567605
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 185141.13589892263 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 185141.13589892263
generateNextArrival(): future time for event 1 at entity 0 will be
185375.359355449
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -1991 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 185141.13589892263
Packet: 10 With Payload: cccccccccccccccccccc sent to B
Timer started at: 185141.14
Packet added to retransmission buffer at index [0]
Next sequence number: 11
_____

EVENT time: 185149.33628345584 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 185149.33628345584
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent
_____

EVENT time: 185156.73052156126 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 185156.73052156126
Recieved ACK for last sent packet. Stopping Timer at
185156.73052156126

Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 185375.359355449 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 185375.359355449
generateNextArrival(): future time for event 1 at entity 0 will be
185664.44288460945
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 185375.359355449
Packet: 11 With Payload: dddddddddddddddddddd sent to B
Timer started at: 185375.36
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 185378.811853389 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 185405.359355449 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 185405.36
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2012 payload:
dddddddddddddddddddd
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 185405.359355449
Starting timer for packet 11 at time 185405.359355449

_____

EVENT time: 185413.83880123287 type: 2 entity: 1
bInput() _____

Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is corrupted. Discarding and ignoring packet
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EVENT time: 185435.359355449 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 185435.36
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: –2012 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 185435.359355449
Starting timer for packet 11 at time 185435.359355449

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EVENT time: 185442.64043092128 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 185442.64043092128
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: –12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

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EVENT time: 185449.35926389348 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 185449.35926389348
Recieved ACK for last sent packet. Stopping Timer at
185449.35926389348
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

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EVENT time: 185664.44288460945 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 185664.44288460945
generateNextArrival(): future time for event 1 at entity 0 will be
186052.22327341526
aOutput()_____

Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: packet being lost
startTimer: starting timer at 185664.44288460945
Packet: 12 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 185664.44
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 185694.44288460945 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 185694.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2033 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 185694.44288460945
Starting timer for packet 12 at time 185694.44288460945

_____

EVENT time: 185702.4023865474 type: 2 entity: 1
bInput() _____
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 185702.4023865474
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____

EVENT time: 185707.8330332346 type: 2 entity: 0
aInput()_____
Current Send_Base: 12   Send_end: 3
Received Corrupted ACK
Number of Corruped Packets to A: 108.0

_____

EVENT time: 185724.44288460945 type: 0 entity: 0

```
aTimerInterrup()_____
TIMEOUT!!! at: 185724.44
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2033  payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 185724.44288460945
Starting timer for packet 12 at time 185724.44288460945

_____


EVENT time: 185728.59605700852  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 13        rcv_end: 4
Packet received is not corrupt. At time 185728.59605700852
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____


EVENT time: 185735.8436231574  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 185735.8436231574
Recieved ACK for last sent packet. Stopping Timer at 185735.8436231574
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 186052.22327341526  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 186052.22327341526
generateNextArrival(): future time for event 1 at entity 0 will be
186243.97717215485
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2054  payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 186052.22327341526
Packet: 13 With Payload: ffffffffffffffffffff sent to B
Timer started at: 186052.22
Packet added to retransmission buffer at index [0]
```

Next sequence number: 14
_____

EVENT time: 186058.46967986078 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 186058.46967986078
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 186064.12912381353 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 186064.12912381353
Recieved ACK for last sent packet. Stopping Timer at
186064.12912381353
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 186243.97717215485 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 186243.97717215485
generateNextArrival(): future time for event 1 at entity 0 will be
186575.95751823473
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2075 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 186243.97717215485
Packet: 14 With Payload: gggggggggggggggggggg sent to B
Timer started at: 186243.98
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

```
EVENT time: 186247.5985900448  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 14      rcv_end: 5
Packet received is not corrupt. At time 186247.5985900448
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message gggggggggggggggggggg delivered to Layer 5
New rcv_base = 15     rcv_end = 6
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____


EVENT time: 186256.2584917752  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 186256.2584917752
Recieved ACK for last sent packet. Stopping Timer at 186256.2584917752
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 186575.95751823473  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 186575.95751823473
generateNextArrival(): future time for event 1 at entity 0 will be
186759.78881191436
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2096  payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 186575.95751823473
Packet: 15 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 186575.96
Packet added to retransmission buffer at index [0]
Next sequence number: 0

_____


EVENT time: 186577.4829554124  type: 2  entity: 1
bInput() _____
Packet 15 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 186577.4829554124
Packet received is in order. Delivering packet(s) to layer5
```

Packet 15 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 186584.69701223786 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 186584.69701223786
Recieved ACK for last sent packet. Stopping Timer at
186584.69701223786
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 186759.78881191436 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 186759.78881191436
generateNextArrival(): future time for event 1 at entity 0 will be
187148.5457930234
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2101 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 186759.78881191436
Packet: 0 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 186759.79
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 186765.723197119 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 186765.723197119
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side

In order ACK 0 Sent
_____

EVENT time: 186767.07422101498 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 186767.07422101498
Recieved ACK for last sent packet. Stopping Timer at
186767.07422101498
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 187148.5457930234 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 187148.5457930234
generateNextArrival(): future time for event 1 at entity 0 will be
187466.85384685805
aOutput()_____
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: −2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
startTimer: starting timer at 187148.5457930234
Packet: 1 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 187148.55
Packet added to retransmission buffer at index [0]
Next sequence number: 2
_____

EVENT time: 187178.5457930234 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 187178.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: −2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 187178.5457930234
Starting timer for packet 1 at time 187178.5457930234

_____

EVENT time: 187187.37791070278 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 187187.37791070278
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 187189.70482497627 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Received Corrupted ACK
Number of Corruped Packets to A: 109.0

_____

EVENT time: 187208.5457930234 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 187208.55
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 1 acknum: 0 checksum: -2122 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 1
startTimer: starting timer at 187208.5457930234
Starting timer for packet 1 at time 187208.5457930234

_____

EVENT time: 187217.478438673 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 187217.478438673
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK1 Sent

_____

EVENT time: 187222.83712271485 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 187222.83712271485

Recieved ACK for last sent packet. Stopping Timer at
187222.83712271485
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 187466.85384685805 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 187466.85384685805
generateNextArrival(): future time for event 1 at entity 0 will be
187658.20490127255
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2143 payload:
kkkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
startTimer: starting timer at 187466.85384685805
Packet: 2 With Payload: kkkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 187466.85
Packet added to retransmission buffer at index [0]
Next sequence number: 3
_____

EVENT time: 187472.33530686353 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 187472.33530686353
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message kkkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent
_____

EVENT time: 187475.13272499765 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 187475.13272499765
Recieved ACK for last sent packet. Stopping Timer at
187475.13272499765
Sliding window 1 times
New send_base: 3 send_end: 10

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 187658.20490127255 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 187658.20490127255
generateNextArrival(): future time for event 1 at entity 0 will be
188012.85439619122
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2164 payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
startTimer: starting timer at 187658.20490127255
Packet: 3 With Payload: llllllllllllllllllll sent to B
Timer started at: 187658.20
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 187665.92269661542 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 187665.92269661542
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message llllllllllllllllllll delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 187667.05069124416 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 187667.05069124416
Recieved ACK for last sent packet. Stopping Timer at
187667.05069124416
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 188012.85439619122 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188012.85439619122
generateNextArrival(): future time for event 1 at entity 0 will be
188020.55726798295
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: −2185 payload:
mmmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 188012.85439619122
Packet: 4 With Payload: mmmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 188012.85
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 188020.55726798295 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188020.55726798295
generateNextArrival(): future time for event 1 at entity 0 will be
188307.54112369142
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2206 payload:
nnnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 188020.55726798295
startTimer: starting timer at 188020.55726798295
Packet: 5 With Payload: nnnnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 188020.56
Packet added to retransmission buffer at index [1]
Next sequence number: 6

_____

EVENT time: 188021.1413006988 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 188024.9033478804 type: 2 entity: 1

bInput() _____
Packet 5 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 188024.9033478804
Packet received is in window, but out of order. Stored in buffer[1]
toLayer3: seqnum: 0 acknum: 3 checksum: −4 payload:
toLayer3: packet being lost
Duplicate ACK 3 Sent

_____

EVENT time: 188050.55726798295 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 188050.56
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: −2185 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
toLayer3: seqnum: 5 acknum: 0 checksum: −2206 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 188050.55726798295
Starting timer for packet 5 at time 188050.55726798295

_____

EVENT time: 188052.24448377933 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 188052.24448377933
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message mmmmmmmmmmmmmmmmmmmmm delivered to Layer 5
Packet 5 Message nnnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
Cumulative ACK 5 Sent

_____

EVENT time: 188058.33762627025 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 188058.33762627025
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 188058.3667409283 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Cumulative ACK 5received
stopTimer: stopping timer at 188058.3667409283
Recieved ACK for last sent packet. Stopping Timer at 188058.3667409283
Sliding window 2 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 188060.93838312928 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Received duplicate ACK 5
Send_Base: 6 Send_End: 13
Retransmission Buffer is empty. Ignore Duplicate ACK

_____

EVENT time: 188307.54112369142 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188307.54112369142
generateNextArrival(): future time for event 1 at entity 0 will be
188440.74831385227
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2227 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 188307.54112369142
Packet: 6 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 188307.54
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 188312.81987975698 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 188312.81987975698
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: −7 payload:

toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 188319.35056611826 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 188319.35056611826
Recieved ACK for last sent packet. Stopping Timer at
188319.35056611826
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 188440.74831385227 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188440.74831385227
generateNextArrival(): future time for event 1 at entity 0 will be
188466.5181432538
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2248 payload:
pppppppppppppppppppp
toLayer3: scheduling arrival on other side
startTimer: starting timer at 188440.74831385227
Packet: 7 With Payload: pppppppppppppppppppp sent to B
Timer started at: 188440.75
Packet added to retransmission buffer at index [0]
Next sequence number: 8

_____

EVENT time: 188443.67976928 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 188443.67976928
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message pppppppppppppppppppp delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

```
EVENT time: 188448.6758934293  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 188448.6758934293
Recieved ACK for last sent packet. Stopping Timer at 188448.6758934293
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 188466.5181432538  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188466.5181432538
generateNextArrival(): future time for event 1 at entity 0 will be
188838.07489242218
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8  acknum: 0  checksum: -2269  payload:
qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
startTimer: starting timer at 188466.5181432538
Packet: 8 With Payload: qqqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 188466.52
Packet added to retransmission buffer at index [0]
Next sequence number: 9
_____


EVENT time: 188475.782860805  type: 2  entity: 1
bInput() _____
Packet 8 received. rcv_base: 8      rcv_end: 15
Packet received is not corrupt. At time 188475.782860805
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 9     rcv_end = 0
toLayer3: seqnum: 0  acknum: 8  checksum: -9  payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
_____


EVENT time: 188483.45094149592  type: 2  entity: 0
aInput()_____
Current Send_Base: 8    Send_end: 15
Expected ACK 8 received
```

```
stopTimer: stopping timer at 188483.45094149592
Recieved ACK for last sent packet. Stopping Timer at
188483.45094149592
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
_____


EVENT time: 188838.07489242218  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 188838.07489242218
generateNextArrival(): future time for event 1 at entity 0 will be
189154.18561357458
aOutput()_____
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9  acknum: 0  checksum: -2290  payload:
rrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 188838.07489242218
Packet: 9 With Payload: rrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 188838.07
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____


EVENT time: 188845.8478957487  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9       rcv_end: 0
Packet received is not corrupt. At time 188845.8478957487
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 10      rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

_____


EVENT time: 188855.32081057155  type: 2  entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 188855.32081057155
Recieved ACK for last sent packet. Stopping Timer at
188855.32081057155
Sliding window 1 times
```

New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 189154.18561357458 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 189154.18561357458
generateNextArrival(): future time for event 1 at entity 0 will be
189266.46931363866
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: −2311 payload:
ssssssssssssssssssss
toLayer3: scheduling arrival on other side
startTimer: starting timer at 189154.18561357458
Packet: 10 With Payload: ssssssssssssssssssss sent to B
Timer started at: 189154.19
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 189160.13153477578 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 189160.13153477578
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message ssssssssssssssssssss delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 189161.63609729294 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 189161.63609729294
Recieved ACK for last sent packet. Stopping Timer at
189161.63609729294
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 189266.46931363866 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 189266.46931363866
generateNextArrival(): future time for event 1 at entity 0 will be
189635.09628589734
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2332 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side
startTimer: starting timer at 189266.46931363866
Packet: 11 With Payload: ttttttttttttttttttttt sent to B
Timer started at: 189266.47
Packet added to retransmission buffer at index [0]
Next sequence number: 12

_____

EVENT time: 189268.46580401008 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 189268.46580401008
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message ttttttttttttttttttttt delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 189278.08539078946 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 189278.08539078946
Recieved ACK for last sent packet. Stopping Timer at
189278.08539078946
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 189635.09628589734 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 189635.09628589734

```
generateNextArrival(): future time for event 1 at entity 0 will be
189782.1222571489
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being lost
startTimer: starting timer at 189635.09628589734
Packet: 12 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 189635.10
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____


EVENT time: 189665.09628589734  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189665.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 189665.09628589734
Starting timer for packet 12 at time 189665.09628589734

_____


EVENT time: 189672.1817987609  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12      rcv_end: 3
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 189695.09628589734  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189695.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 189695.09628589734
Starting timer for packet 12 at time 189695.09628589734

_____
```

```
EVENT time: 189702.4149906918  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12       rcv_end: 3
Packet received is not corrupt. At time 189702.4149906918
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message uuuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 13      rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: packet being lost
In order ACK 12 Sent

_____


EVENT time: 189725.09628589734  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189725.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 189725.09628589734
Starting timer for packet 12 at time 189725.09628589734

_____


EVENT time: 189733.2398144474  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 13       rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 189755.09628589734  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189755.10
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12  acknum: 0  checksum: -2353  payload:
uuuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 189755.09628589734
Starting timer for packet 12 at time 189755.09628589734

_____


EVENT time: 189760.82549516275  type: 2  entity: 1
bInput() _____
```

```
Packet 12 received. rcv_base: 13        rcv_end: 4
Packet received is not corrupt. At time 189760.82549516275
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK12 Sent

_____


EVENT time: 189766.74944303714  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 189766.74944303714
Recieved ACK for last sent packet. Stopping Timer at
189766.74944303714
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 189782.1222571489  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 189782.1222571489
generateNextArrival(): future time for event 1 at entity 0 will be
190123.09945982232
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: packet being lost
startTimer: starting timer at 189782.1222571489
Packet: 13 With Payload: vvvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 189782.12
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 189812.1222571489  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189812.12
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2374  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 189812.1222571489
```

Starting timer for packet 13 at time 189812.1222571489
_____

EVENT time: 189814.45246742145 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 189814.45246742145
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 13 Sent

_____

EVENT time: 189817.11886959436 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Received Corrupted ACK
Number of Corruped Packets to A: 110.0

_____

EVENT time: 189842.1222571489 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 189842.12
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2374 payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 189842.1222571489
Starting timer for packet 13 at time 189842.1222571489

_____

EVENT time: 189844.58815271457 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 189844.58815271457
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent

_____

EVENT time: 189845.71340067746 type: 2 entity: 0

aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 189845.71340067746
Recieved ACK for last sent packet. Stopping Timer at
189845.71340067746
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 190123.09945982232 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 190123.09945982232
generateNextArrival(): future time for event 1 at entity 0 will be
190416.943876461
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -2395 payload:
wwwwwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 190123.09945982232
Packet: 14 With Payload: wwwwwwwwwwwwwwwwwwww sent to B
Timer started at: 190123.10
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 190128.58586382636 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 190128.58586382636
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message wwwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
In order ACK 14 Sent

_____

EVENT time: 190132.64537491984 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 190132.64537491984

Recieved ACK for last sent packet. Stopping Timer at
190132.64537491984
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 190416.943876461 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 190416.943876461
generateNextArrival(): future time for event 1 at entity 0 will be
190704.9409466841
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2416 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 190416.943876461
Packet: 15 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 190416.94
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 190418.425366985 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 190418.425366985
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent
_____

EVENT time: 190425.41831720932 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 190425.41831720932
Recieved ACK for last sent packet. Stopping Timer at
190425.41831720932
Sliding window 1 times
New send_base: 0 send_end: 7

Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 190704.9409466841 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 190704.9409466841
generateNextArrival(): future time for event 1 at entity 0 will be
190975.18845179596
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
startTimer: starting timer at 190704.9409466841
Packet: 0 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 190704.94
Packet added to retransmission buffer at index [0]
Next sequence number: 1

_____

EVENT time: 190710.77755058437 type: 2 entity: 1
bInput() _____
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 190710.77755058437
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____

EVENT time: 190717.27445295567 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Received Corrupted ACK
Number of Corruped Packets to A: 111.0

_____

EVENT time: 190734.9409466841 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 190734.94
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 0 acknum: 0 checksum: -2421 payload:
yyyyyyyyyyyyyyyyyyyy
toLayer3: scheduling arrival on other side
Retransmitting Packet 0
startTimer: starting timer at 190734.9409466841
Starting timer for packet 0 at time 190734.9409466841

————————————————————

EVENT time: 190737.11130100398 type: 2 entity: 1
bInput() ——————————————————————
Packet 0 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 190737.11130100398
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK0 Sent

————————————————————

EVENT time: 190742.911648915 type: 2 entity: 0
aInput()——————————————————————
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 190742.911648915
Recieved ACK for last sent packet. Stopping Timer at 190742.911648915
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

————————————————————

EVENT time: 190975.18845179596 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 190975.18845179596
generateNextArrival(): future time for event 1 at entity 0 will be
191223.3161412396
aOutput()——————————————————————
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2442 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 190975.18845179596
Packet: 1 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 190975.19
Packet added to retransmission buffer at index [0]
Next sequence number: 2

————————————————————

EVENT time: 190982.660420545 type: 2 entity: 1
bInput() _____
Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 190982.660420545
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 190992.22837000634 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 190992.22837000634
Recieved ACK for last sent packet. Stopping Timer at
190992.22837000634
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 191223.3161412396 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191223.3161412396
generateNextArrival(): future time for event 1 at entity 0 will be
191243.60484633924
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -1943 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 191223.3161412396
Packet: 2 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 191223.32
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 191224.59685048976 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9

Packet received is not corrupt. At time 191224.59685048976
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 191234.17963194672 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 191234.17963194672
Recieved ACK for last sent packet. Stopping Timer at
191234.17963194672
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 191243.60484633924 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191243.60484633924
generateNextArrival(): future time for event 1 at entity 0 will be
191545.0056459242
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -1964 payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
startTimer: starting timer at 191243.60484633924
Packet: 3 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 191243.60
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 191252.0955534531 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 191252.0955534531
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 4   rcv_end = 11

toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent
_____

EVENT time: 191255.30332346563 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 191255.30332346563
Recieved ACK for last sent packet. Stopping Timer at
191255.30332346563
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 191545.0056459242 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191545.0056459242
generateNextArrival(): future time for event 1 at entity 0 will be
191554.64949491862
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -1985 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 191545.0056459242
Packet: 4 With Payload: cccccccccccccccccccc sent to B
Timer started at: 191545.01
Packet added to retransmission buffer at index [0]
Next sequence number: 5
_____

EVENT time: 191549.6095461897 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 191549.6095461897
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: packet being lost
In order ACK 4 Sent
_____

EVENT time: 191554.64949491862 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191554.64949491862
generateNextArrival(): future time for event 1 at entity 0 will be
191826.06891079433
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2006 payload:
dddddddddddddddddddd
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 191554.64949491862
startTimer: starting timer at 191554.64949491862
Packet: 5 With Payload: dddddddddddddddddddd sent to B
Timer started at: 191554.65
Packet added to retransmission buffer at index [1]
Next sequence number: 6
_____

EVENT time: 191561.87865840626 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 191561.87865840626
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 5 Sent
_____

EVENT time: 191567.84160893576 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Received Corrupted ACK
Number of Corruped Packets to A: 112.0
_____

EVENT time: 191584.64949491862 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 191584.65
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -1985 payload:

cccccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
toLayer3: seqnum: 5 acknum: 0 checksum: -2006 payload:
dddddddddddddddddddddd
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 191584.64949491862
Starting timer for packet 5 at time 191584.64949491862
_____

EVENT time: 191590.0658589434 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 191590.0658589434
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 191595.5228736228 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 191595.5228736228
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 191599.28827784045 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Cumulative ACK 5received
stopTimer: stopping timer at 191599.28827784045
Recieved ACK for last sent packet. Stopping Timer at
191599.28827784045
Sliding window 2 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 191605.6514175847 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Received duplicate ACK 5
Send_Base: 6 Send_End: 13

Retransmission Buffer is empty. Ignore Duplicate ACK
_____

EVENT time: 191826.06891079433 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191826.06891079433
generateNextArrival(): future time for event 1 at entity 0 will be
191831.0617389446
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2027 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 191826.06891079433
Packet: 6 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 191826.07
Packet added to retransmission buffer at index [0]
Next sequence number: 7

_____

EVENT time: 191828.92126224548 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 191828.92126224548
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 191831.0617389446 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 191831.0617389446
generateNextArrival(): future time for event 1 at entity 0 will be
192029.74944303714
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2048 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 191831.0617389446

startTimer: starting timer at 191831.0617389446
Packet: 7 With Payload: ffffffffffffffffff sent to B
Timer started at: 191831.06
Packet added to retransmission buffer at index [1]
Next sequence number: 8
_____

EVENT time: 191832.93105868704 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 191832.93105868704
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message ffffffffffffffffff delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: –8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____

EVENT time: 191835.10174871053 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 191842.5377361369 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 191842.5377361369
Recieved ACK for last sent packet. Stopping Timer at 191842.5377361369
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 192029.74944303714 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 192029.74944303714
generateNextArrival(): future time for event 1 at entity 0 will be
192329.91729483925
aOutput()_____
Send_Base: 8 Send_end: 15

NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8 acknum: 0 checksum: -2069 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 192029.74944303714
Packet: 8 With Payload: gggggggggggggggggggggg sent to B
Timer started at: 192029.75
Packet added to retransmission buffer at index [0]
Next sequence number: 9
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EVENT time: 192038.65984069332 type: 2 entity: 1
bInput() ———————————————————————————
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 192038.65984069332
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message gggggggggggggggggggggg delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent
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EVENT time: 192040.0262459181 type: 2 entity: 0
aInput()———————————————————————————
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 192040.0262459181
Recieved ACK for last sent packet. Stopping Timer at 192040.0262459181
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0
———————————————————————————

EVENT time: 192329.91729483925 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 192329.91729483925
generateNextArrival(): future time for event 1 at entity 0 will be
192667.22006897177
aOutput()———————————————————————————
Send_Base: 9 Send_end: 0
NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side

```
startTimer: starting timer at 192329.91729483925
Packet: 9 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 192329.92
Packet added to retransmission buffer at index [0]
Next sequence number: 10
_____


EVENT time: 192335.28119754625  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 9      rcv_end: 0
Packet received is not corrupt. At time 192335.28119754625
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 10     rcv_end = 1
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: packet being lost
In order ACK 9 Sent

_____


EVENT time: 192359.91729483925  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 192359.92
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9  acknum: 0  checksum: -2090  payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 192359.91729483925
Starting timer for packet 9 at time 192359.91729483925

_____


EVENT time: 192362.8852809228  type: 2  entity: 1
bInput() _____
Packet 9 received. rcv_base: 10      rcv_end: 1
Packet received is not corrupt. At time 192362.8852809228
toLayer3: seqnum: 0  acknum: 9  checksum: -10  payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____


EVENT time: 192371.24359874256  type: 2  entity: 0
aInput()_____
Current Send_Base: 9    Send_end: 0
Received Corrupted ACK
Number of Corruped Packets to A: 113.0
```

_____

EVENT time: 192389.91729483925 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 192389.92
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 9 acknum: 0 checksum: -2090 payload:
hhhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
Retransmitting Packet 9
startTimer: starting timer at 192389.91729483925
Starting timer for packet 9 at time 192389.91729483925

_____

EVENT time: 192397.95892208617 type: 2 entity: 1
bInput() _____
Packet 9 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 192397.95892208617
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK9 Sent

_____

EVENT time: 192400.4888149662 type: 2 entity: 0
aInput()_____
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 192400.4888149662
Recieved ACK for last sent packet. Stopping Timer at 192400.4888149662
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 192667.22006897177 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 192667.22006897177
generateNextArrival(): future time for event 1 at entity 0 will be
193058.34528641615
aOutput()_____
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2111 payload:
iiiiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side

startTimer: starting timer at 192667.22006897177
Packet: 10 With Payload: iiiiiiiiiiiiiiiiiiii sent to B
Timer started at: 192667.22
Packet added to retransmission buffer at index [0]
Next sequence number: 11

_____

EVENT time: 192670.6533402508 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 192670.6533402508
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message iiiiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: -11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 192673.79601428262 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 192673.79601428262
Recieved ACK for last sent packet. Stopping Timer at
192673.79601428262
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 193058.34528641615 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 193058.34528641615
generateNextArrival(): future time for event 1 at entity 0 will be
193428.14416943872
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
startTimer: starting timer at 193058.34528641615
Packet: 11 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 193058.35
Packet added to retransmission buffer at index [0]

Next sequence number: 12
_____

EVENT time: 193088.34528641615 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193088.35
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 11 acknum: 0 checksum: -2132 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 11
startTimer: starting timer at 193088.34528641615
Starting timer for packet 11 at time 193088.34528641615

_____

EVENT time: 193095.85927915273 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 193095.85927915273
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 193100.44148075802 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 193100.44148075802
Recieved ACK for last sent packet. Stopping Timer at
193100.44148075802
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 193428.14416943872 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 193428.14416943872
generateNextArrival(): future time for event 1 at entity 0 will be
193514.08429212312
aOutput()_____
Send_Base: 12 Send_end: 3

NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
startTimer: starting timer at 193428.14416943872
Packet: 12 With Payload: kkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 193428.14
Packet added to retransmission buffer at index [0]
Next sequence number: 13

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EVENT time: 193458.14416943872 type: 0 entity: 0
aTimerInterrup()————————————————————————————
TIMEOUT!!! at: 193458.14
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 12 acknum: 0 checksum: -2153 payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 12
startTimer: starting timer at 193458.14416943872
Starting timer for packet 12 at time 193458.14416943872

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EVENT time: 193465.12173833424 type: 2 entity: 1
bInput() ————————————————————————————
Packet 12 received. rcv_base: 12   rcv_end: 3
Packet received is not corrupt. At time 193465.12173833424
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 13   rcv_end = 4
toLayer3: seqnum: 0 acknum: 12 checksum: -13 payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

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EVENT time: 193474.56855983147 type: 2 entity: 0
aInput()————————————————————————————
Current Send_Base: 12   Send_end: 3
Expected ACK 12 received
stopTimer: stopping timer at 193474.56855983147
Recieved ACK for last sent packet. Stopping Timer at
193474.56855983147
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

————————————————————————————

```
EVENT time: 193514.08429212312  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 193514.08429212312
generateNextArrival(): future time for event 1 at entity 0 will be
193660.8172856837
aOutput()_____
Send_Base: 13 Send_end: 4
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -2174  payload:
llllllllllllllllllll
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 193514.08429212312
Packet: 13 With Payload: llllllllllllllllllll sent to B
Timer started at: 193514.08
Packet added to retransmission buffer at index [0]
Next sequence number: 14

_____


EVENT time: 193515.19937742237  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13      rcv_end: 4
Packet received is corrupted. Discarding and ignoring packet

_____


EVENT time: 193544.08429212312  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193544.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2174  payload:
llllllllllllllllllll
toLayer3: packet being lost
Retransmitting Packet 13
startTimer: starting timer at 193544.08429212312
Starting timer for packet 13 at time 193544.08429212312

_____


EVENT time: 193574.08429212312  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193574.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13  acknum: 0  checksum: -2174  payload:
llllllllllllllllllll
toLayer3: scheduling arrival on other side
```

Retransmitting Packet 13
startTimer: starting timer at 193574.08429212312
Starting timer for packet 13 at time 193574.08429212312
_____

EVENT time: 193576.84133426918 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 13   rcv_end: 4
Packet received is not corrupt. At time 193576.84133426918
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message llllllllllllllllll delivered to Layer 5
New rcv_base = 14   rcv_end = 5
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: packet being lost
In order ACK 13 Sent

_____

EVENT time: 193604.08429212312 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193604.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
llllllllllllllllll
toLayer3: packet being lost
Retransmitting Packet 13
startTimer: starting timer at 193604.08429212312
Starting timer for packet 13 at time 193604.08429212312

_____

EVENT time: 193634.08429212312 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193634.08
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 13 acknum: 0 checksum: -2174 payload:
llllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 13
startTimer: starting timer at 193634.08429212312
Starting timer for packet 13 at time 193634.08429212312

_____

EVENT time: 193637.800469985 type: 2 entity: 1
bInput() _____
Packet 13 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 193637.800469985
toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:

toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK13 Sent
_____

EVENT time: 193642.39942625197 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 193642.39942625197
Recieved ACK for last sent packet. Stopping Timer at
193642.39942625197
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 193660.8172856837 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 193660.8172856837
generateNextArrival(): future time for event 1 at entity 0 will be
193973.42448194823
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: −2195 payload:
mmmmmmmmmmmmmmmmmmmmm
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 193660.8172856837
Packet: 14 With Payload: mmmmmmmmmmmmmmmmmmmmm sent to B
Timer started at: 193660.82
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 193669.3632007812 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 193690.8172856837 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193690.82
Retransmitting every packet since last ACK'd

toLayer3: seqnum: 14 acknum: 0 checksum: -2195 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 193690.8172856837
Starting timer for packet 14 at time 193690.8172856837

_____

EVENT time: 193699.96581926933 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 193699.96581926933
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message mmmmmmmmmmmmmmmmmmmm delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
In order ACK 14 Sent

_____

EVENT time: 193720.8172856837 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 193720.82
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14 acknum: 0 checksum: -2195 payload:
mmmmmmmmmmmmmmmmmmmm
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 193720.8172856837
Starting timer for packet 14 at time 193720.8172856837

_____

EVENT time: 193722.62837611005 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 193722.62837611005
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____

EVENT time: 193729.5537583544 type: 2 entity: 0
aInput()_____
Current Send_Base: 14   Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 193729.5537583544

Recieved ACK for last sent packet. Stopping Timer at 193729.5537583544
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 193973.42448194823 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 193973.42448194823
generateNextArrival(): future time for event 1 at entity 0 will be
194061.3299966429
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
startTimer: starting timer at 193973.42448194823
Packet: 15 With Payload: nnnnnnnnnnnnnnnnnnnn sent to B
Timer started at: 193973.42
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 193977.4730063783 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 193977.4730063783
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message nnnnnnnnnnnnnnnnnnnn delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 193985.07022309024 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Received Corrupted ACK
Number of Corruped Packets to A: 114.0

_____

EVENT time: 194003.42448194823 type: 0 entity: 0

aTimerInterrup()_____
TIMEOUT!!! at: 194003.42
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 15 acknum: 0 checksum: -2216 payload:
nnnnnnnnnnnnnnnnnnnnn
toLayer3: scheduling arrival on other side
Retransmitting Packet 15
startTimer: starting timer at 194003.42448194823
Starting timer for packet 15 at time 194003.42448194823

_____

EVENT time: 194008.71724600962 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 194008.71724600962
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK15 Sent

_____

EVENT time: 194016.85555589455 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 194016.85555589455
Recieved ACK for last sent packet. Stopping Timer at
194016.85555589455
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 194061.3299966429 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 194061.3299966429
generateNextArrival(): future time for event 1 at entity 0 will be
194070.4855494857
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2221 payload:
ooooooooooooooooooooo
toLayer3: scheduling arrival on other side
startTimer: starting timer at 194061.3299966429
Packet: 0 With Payload: ooooooooooooooooooooo sent to B
Timer started at: 194061.33

```
Packet added to retransmission buffer at index [0]
Next sequence number: 1
_____


EVENT time: 194067.4550004577  type: 2  entity: 1
bInput() _____
Packet 0 received. rcv_base: 0      rcv_end: 7
Packet received is not corrupt. At time 194067.4550004577
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message ooooooooooooooooooooo delivered to Layer 5
New rcv_base = 1     rcv_end = 8
toLayer3: seqnum: 0  acknum: 0  checksum: -1  payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

_____


EVENT time: 194070.4855494857  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 194070.4855494857
generateNextArrival(): future time for event 1 at entity 0 will be
194451.99133274323
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1  acknum: 0  checksum: -2242  payload:
ppppppppppppppppppppp
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 194070.4855494857
startTimer: starting timer at 194070.4855494857
Packet: 1 With Payload: ppppppppppppppppppppp sent to B
Timer started at: 194070.49
Packet added to retransmission buffer at index [1]
Next sequence number: 2
_____


EVENT time: 194074.58763389988  type: 2  entity: 1
bInput() _____
Packet 1 received. rcv_base: 1      rcv_end: 8
Packet received is not corrupt. At time 194074.58763389988
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ppppppppppppppppppppp delivered to Layer 5
New rcv_base = 2     rcv_end = 9
toLayer3: seqnum: 0  acknum: 1  checksum: -2  payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____
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EVENT time: 194076.43461409336 type: 2 entity: 0
aInput()_____
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 194080.79049043235 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 194080.79049043235
Recieved ACK for last sent packet. Stopping Timer at
194080.79049043235
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 194451.99133274323 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 194451.99133274323
generateNextArrival(): future time for event 1 at entity 0 will be
194847.1938230536
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:
qqqqqqqqqqqqqqqqqqqq
toLayer3: packet being lost
startTimer: starting timer at 194451.99133274323
Packet: 2 With Payload: qqqqqqqqqqqqqqqqqqqq sent to B
Timer started at: 194451.99
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 194481.99133274323 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 194481.99
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2263 payload:

qqqqqqqqqqqqqqqqqqqqq
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 194481.99133274323
Starting timer for packet 2 at time 194481.99133274323

_____

EVENT time: 194483.00863673812 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 194483.00863673812
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message qqqqqqqqqqqqqqqqqqqqq delivered to Layer 5
New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
In order ACK 2 Sent

_____

EVENT time: 194487.74025696577 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 194487.74025696577
Recieved ACK for last sent packet. Stopping Timer at
194487.74025696577
Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 194847.1938230536 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 194847.1938230536
generateNextArrival(): future time for event 1 at entity 0 will be
195082.71126438177
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2284 payload:
rrrrrrrrrrrrrrrrrrrrr
toLayer3: scheduling arrival on other side
startTimer: starting timer at 194847.1938230536
Packet: 3 With Payload: rrrrrrrrrrrrrrrrrrrrr sent to B
Timer started at: 194847.19
Packet added to retransmission buffer at index [0]

Next sequence number: 4
_____

EVENT time: 194852.51158177425 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 194852.51158177425
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message rrrrrrrrrrrrrrrrrrr delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 194859.8599505599 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 194859.8599505599
Recieved ACK for last sent packet. Stopping Timer at 194859.8599505599
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 195082.71126438177 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 195082.71126438177
generateNextArrival(): future time for event 1 at entity 0 will be
195465.18143253875
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4 acknum: 0 checksum: -2305 payload:
sssssssssssssssssss
toLayer3: packet being lost
startTimer: starting timer at 195082.71126438177
Packet: 4 With Payload: sssssssssssssssssssss sent to B
Timer started at: 195082.71
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____

EVENT time: 195112.71126438177 type: 0 entity: 0

aTimerInterrup()_____
TIMEOUT!!! at: 195112.71
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 4 acknum: 0 checksum: -2305 payload:
sssssssssssssssssss
toLayer3: scheduling arrival on other side
Retransmitting Packet 4
startTimer: starting timer at 195112.71126438177
Starting timer for packet 4 at time 195112.71126438177

_____

EVENT time: 195118.3844416638 type: 2 entity: 1
bInput() _____
Packet 4 received. rcv_base: 4   rcv_end: 11
Packet received is not corrupt. At time 195118.3844416638
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message sssssssssssssssssss delivered to Layer 5
New rcv_base = 5   rcv_end = 12
toLayer3: seqnum: 0 acknum: 4 checksum: -5 payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____

EVENT time: 195122.34699545268 type: 2 entity: 0
aInput()_____
Current Send_Base: 4   Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 195122.34699545268
Recieved ACK for last sent packet. Stopping Timer at
195122.34699545268
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 195465.18143253875 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 195465.18143253875
generateNextArrival(): future time for event 1 at entity 0 will be
195487.20358897664
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: -2326 payload:
ttttttttttttttttttttt
toLayer3: scheduling arrival on other side

startTimer: starting timer at 195465.18143253875
Packet: 5 With Payload: tttttttttttttttttttt sent to B
Timer started at: 195465.18
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 195469.21677297272 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 195469.21677297272
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message tttttttttttttttttttt delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 195472.31467635112 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Expected ACK 5 received
stopTimer: stopping timer at 195472.31467635112
Recieved ACK for last sent packet. Stopping Timer at
195472.31467635112
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 195487.20358897664 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 195487.20358897664
generateNextArrival(): future time for event 1 at entity 0 will be
195721.84209723189
aOutput()_____
Send_Base: 6 Send_end: 13
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: -2347 payload:
uuuuuuuuuuuuuuuuuuuu
toLayer3: scheduling arrival on other side
startTimer: starting timer at 195487.20358897664
Packet: 6 With Payload: uuuuuuuuuuuuuuuuuuuu sent to B
Timer started at: 195487.20
Packet added to retransmission buffer at index [0]

Next sequence number: 7
_____

EVENT time: 195491.6124759666 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 195491.6124759666
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message uuuuuuuuuuuuuuuuuuuu delivered to Layer 5
New rcv_base = 7   rcv_end = 14
toLayer3: seqnum: 0 acknum: 6 checksum: -7 payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____

EVENT time: 195493.60319833973 type: 2 entity: 0
aInput()_____
Current Send_Base: 6   Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 195493.60319833973
Recieved ACK for last sent packet. Stopping Timer at
195493.60319833973
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 195721.84209723189 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 195721.84209723189
generateNextArrival(): future time for event 1 at entity 0 will be
195882.91879024619
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7 acknum: 0 checksum: -2368 payload:
vvvvvvvvvvvvvvvvvvvv
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
startTimer: starting timer at 195721.84209723189
Packet: 7 With Payload: vvvvvvvvvvvvvvvvvvvv sent to B
Timer started at: 195721.84
Packet added to retransmission buffer at index [0]
Next sequence number: 8

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```
EVENT time: 195725.7145603808  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7       rcv_end: 14
Packet received is corrupted. Discarding and ignoring packet
_____


EVENT time: 195751.84209723189  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 195751.84
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7  acknum: 0  checksum: -2368  payload:
vvvvvvvvvvvvvvvvvvvvv
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 195751.84209723189
Starting timer for packet 7 at time 195751.84209723189

_____


EVENT time: 195761.11862544625  type: 2  entity: 1
bInput() _____
Packet 7 received. rcv_base: 7       rcv_end: 14
Packet received is not corrupt. At time 195761.11862544625
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message vvvvvvvvvvvvvvvvvvvvv delivered to Layer 5
New rcv_base = 8     rcv_end = 15
toLayer3: seqnum: 0  acknum: 7  checksum: -8  payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent

_____


EVENT time: 195763.11374248474  type: 2  entity: 0
aInput()_____
Current Send_Base: 7    Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 195763.11374248474
Recieved ACK for last sent packet. Stopping Timer at
195763.11374248474
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 195882.91879024619  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 195882.91879024619
```

generateNextArrival(): future time for event 1 at entity 0 will be
196065.32181768233
aOutput()_____
Send_Base: 8 Send_end: 15
NextSeqNo: 8
NextSeqNo is in send window
toLayer3: seqnum: 8   acknum: 0   checksum: -2389   payload:
wwwwwwwwwwwwwwwww
toLayer3: scheduling arrival on other side
startTimer: starting timer at 195882.91879024619
Packet: 8 With Payload: wwwwwwwwwwwwwwwwwww sent to B
Timer started at: 195882.92
Packet added to retransmission buffer at index [0]
Next sequence number: 9

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EVENT time: 195885.57338175594 type: 2 entity: 1
bInput() _____
Packet 8 received. rcv_base: 8   rcv_end: 15
Packet received is not corrupt. At time 195885.57338175594
Packet received is in order. Delivering packet(s) to layer5
Packet 8 Message wwwwwwwwwwwwwwwwwww delivered to Layer 5
New rcv_base = 9   rcv_end = 0
toLayer3: seqnum: 0 acknum: 8 checksum: -9 payload:
toLayer3: scheduling arrival on other side
In order ACK 8 Sent

_____

EVENT time: 195889.13711966298 type: 2 entity: 0
aInput()_____
Current Send_Base: 8   Send_end: 15
Expected ACK 8 received
stopTimer: stopping timer at 195889.13711966298
Recieved ACK for last sent packet. Stopping Timer at
195889.13711966298
Sliding window 1 times
New send_base: 9 send_end: 0
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 196065.32181768233 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 196065.32181768233
generateNextArrival(): future time for event 1 at entity 0 will be
196229.85320596932
aOutput()_____
Send_Base: 9 Send_end: 0

NextSeqNo: 9
NextSeqNo is in send window
toLayer3: seqnum: 9 acknum: 0 checksum: -2410 payload:
xxxxxxxxxxxxxxxxxxxx
toLayer3: scheduling arrival on other side
startTimer: starting timer at 196065.32181768233
Packet: 9 With Payload: xxxxxxxxxxxxxxxxxxxx sent to B
Timer started at: 196065.32
Packet added to retransmission buffer at index [0]
Next sequence number: 10

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EVENT time: 196075.04715109704 type: 2 entity: 1
bInput() ——————————————————————————————
Packet 9 received. rcv_base: 9   rcv_end: 0
Packet received is not corrupt. At time 196075.04715109704
Packet received is in order. Delivering packet(s) to layer5
Packet 9 Message xxxxxxxxxxxxxxxxxxxx delivered to Layer 5
New rcv_base = 10   rcv_end = 1
toLayer3: seqnum: 0 acknum: 9 checksum: -10 payload:
toLayer3: scheduling arrival on other side
In order ACK 9 Sent

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EVENT time: 196083.42799157678 type: 2 entity: 0
aInput()——————————————————————————————
Current Send_Base: 9   Send_end: 0
Expected ACK 9 received
stopTimer: stopping timer at 196083.42799157678
Recieved ACK for last sent packet. Stopping Timer at
196083.42799157678
Sliding window 1 times
New send_base: 10 send_end: 1
Number of messages waiting in buffer after ACK: 0

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EVENT time: 196229.85320596932 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 196229.85320596932
generateNextArrival(): future time for event 1 at entity 0 will be
196519.66917935718
aOutput()——————————————————————————————
Send_Base: 10 Send_end: 1
NextSeqNo: 10
NextSeqNo is in send window
toLayer3: seqnum: 10 acknum: 0 checksum: -2431 payload:
yyyyyyyyyyyyyyyyyyyy

toLayer3: scheduling arrival on other side
startTimer: starting timer at 196229.85320596932
Packet: 10 With Payload: yyyyyyyyyyyyyyyyyyyy sent to B
Timer started at: 196229.85
Packet added to retransmission buffer at index [0]
Next sequence number: 11

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EVENT time: 196235.09158604685 type: 2 entity: 1
bInput() _____
Packet 10 received. rcv_base: 10   rcv_end: 1
Packet received is not corrupt. At time 196235.09158604685
Packet received is in order. Delivering packet(s) to layer5
Packet 10 Message yyyyyyyyyyyyyyyyyyyy delivered to Layer 5
New rcv_base = 11   rcv_end = 2
toLayer3: seqnum: 0 acknum: 10 checksum: −11 payload:
toLayer3: scheduling arrival on other side
In order ACK 10 Sent

_____

EVENT time: 196240.7084566789 type: 2 entity: 0
aInput()_____
Current Send_Base: 10   Send_end: 1
Expected ACK 10 received
stopTimer: stopping timer at 196240.7084566789
Recieved ACK for last sent packet. Stopping Timer at 196240.7084566789
Sliding window 1 times
New send_base: 11 send_end: 2
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 196519.66917935718 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 196519.66917935718
generateNextArrival(): future time for event 1 at entity 0 will be
196673.2139042328
aOutput()_____
Send_Base: 11 Send_end: 2
NextSeqNo: 11
NextSeqNo is in send window
toLayer3: seqnum: 11 acknum: 0 checksum: −2452 payload:
zzzzzzzzzzzzzzzzzzzz
toLayer3: scheduling arrival on other side
startTimer: starting timer at 196519.66917935718
Packet: 11 With Payload: zzzzzzzzzzzzzzzzzzzz sent to B
Timer started at: 196519.67
Packet added to retransmission buffer at index [0]

Next sequence number: 12
_____

EVENT time: 196527.20432142084 type: 2 entity: 1
bInput() _____
Packet 11 received. rcv_base: 11   rcv_end: 2
Packet received is not corrupt. At time 196527.20432142084
Packet received is in order. Delivering packet(s) to layer5
Packet 11 Message zzzzzzzzzzzzzzzzzzzz delivered to Layer 5
New rcv_base = 12   rcv_end = 3
toLayer3: seqnum: 0 acknum: 11 checksum: -12 payload:
toLayer3: scheduling arrival on other side
In order ACK 11 Sent

_____

EVENT time: 196535.9771111178 type: 2 entity: 0
aInput()_____
Current Send_Base: 11   Send_end: 2
Expected ACK 11 received
stopTimer: stopping timer at 196535.9771111178
Recieved ACK for last sent packet. Stopping Timer at 196535.9771111178
Sliding window 1 times
New send_base: 12 send_end: 3
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 196673.2139042328 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 196673.2139042328
generateNextArrival(): future time for event 1 at entity 0 will be
196674.81307412934
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 12
NextSeqNo is in send window
toLayer3: seqnum: 12 acknum: 0 checksum: -1953 payload:
aaaaaaaaaaaaaaaaaaaa
toLayer3: scheduling arrival on other side
startTimer: starting timer at 196673.2139042328
Packet: 12 With Payload: aaaaaaaaaaaaaaaaaaaa sent to B
Timer started at: 196673.21
Packet added to retransmission buffer at index [0]
Next sequence number: 13

_____

EVENT time: 196674.81307412934 type: 1 entity: 0

```
generateNextArrival(): called
generateNextArrival(): time is 196674.81307412934
generateNextArrival(): future time for event 1 at entity 0 will be
196799.76805932788
aOutput()_____
Send_Base: 12 Send_end: 3
NextSeqNo: 13
NextSeqNo is in send window
toLayer3: seqnum: 13  acknum: 0  checksum: -1974  payload:
bbbbbbbbbbbbbbbbbbbb
toLayer3: scheduling arrival on other side
stopTimer: stopping timer at 196674.81307412934
startTimer: starting timer at 196674.81307412934
Packet: 13 With Payload: bbbbbbbbbbbbbbbbbbbb sent to B
Timer started at: 196674.81
Packet added to retransmission buffer at index [1]
Next sequence number: 14

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EVENT time: 196679.56935331266  type: 2  entity: 1
bInput() _____
Packet 12 received. rcv_base: 12       rcv_end: 3
Packet received is not corrupt. At time 196679.56935331266
Packet received is in order. Delivering packet(s) to layer5
Packet 12 Message aaaaaaaaaaaaaaaaaaaa delivered to Layer 5
New rcv_base = 13      rcv_end = 4
toLayer3: seqnum: 0  acknum: 12  checksum: -13  payload:
toLayer3: scheduling arrival on other side
In order ACK 12 Sent

_____


EVENT time: 196681.3897824029  type: 2  entity: 0
aInput()_____
Current Send_Base: 12    Send_end: 3
Expected ACK 12 received
Sliding window 1 times
New send_base: 13 send_end: 4
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 196688.06720175775  type: 2  entity: 1
bInput() _____
Packet 13 received. rcv_base: 13       rcv_end: 4
Packet received is not corrupt. At time 196688.06720175775
Packet received is in order. Delivering packet(s) to layer5
Packet 13 Message bbbbbbbbbbbbbbbbbbbb delivered to Layer 5
New rcv_base = 14      rcv_end = 5
```

toLayer3: seqnum: 0 acknum: 13 checksum: -14 payload:
toLayer3: scheduling arrival on other side
In order ACK 13 Sent
_____

EVENT time: 196692.3618274482 type: 2 entity: 0
aInput()_____
Current Send_Base: 13   Send_end: 4
Expected ACK 13 received
stopTimer: stopping timer at 196692.3618274482
Recieved ACK for last sent packet. Stopping Timer at 196692.3618274482
Sliding window 1 times
New send_base: 14 send_end: 5
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 196799.76805932788 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 196799.76805932788
generateNextArrival(): future time for event 1 at entity 0 will be
197028.00988799697
aOutput()_____
Send_Base: 14 Send_end: 5
NextSeqNo: 14
NextSeqNo is in send window
toLayer3: seqnum: 14 acknum: 0 checksum: -1995 payload:
cccccccccccccccccccc
toLayer3: scheduling arrival on other side
startTimer: starting timer at 196799.76805932788
Packet: 14 With Payload: cccccccccccccccccccc sent to B
Timer started at: 196799.77
Packet added to retransmission buffer at index [0]
Next sequence number: 15

_____

EVENT time: 196808.40351573218 type: 2 entity: 1
bInput() _____
Packet 14 received. rcv_base: 14   rcv_end: 5
Packet received is not corrupt. At time 196808.40351573218
Packet received is in order. Delivering packet(s) to layer5
Packet 14 Message cccccccccccccccccccc delivered to Layer 5
New rcv_base = 15   rcv_end = 6
toLayer3: seqnum: 0 acknum: 14 checksum: -15 payload:
toLayer3: packet being lost
In order ACK 14 Sent

_____

```
EVENT time: 196829.76805932788  type: 0  entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 196829.77
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 14  acknum: 0  checksum: -1995  payload:
ccccccccccccccccccccc
toLayer3: scheduling arrival on other side
Retransmitting Packet 14
startTimer: starting timer at 196829.76805932788
Starting timer for packet 14 at time 196829.76805932788

_____


EVENT time: 196832.08288827163  type: 2  entity: 1
bInput() _____
Packet 14 received. rcv_base: 15      rcv_end: 6
Packet received is not corrupt. At time 196832.08288827163
toLayer3: seqnum: 0  acknum: 14  checksum: -15  payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK14 Sent

_____


EVENT time: 196835.86416211422  type: 2  entity: 0
aInput()_____
Current Send_Base: 14    Send_end: 5
Expected ACK 14 received
stopTimer: stopping timer at 196835.86416211422
Recieved ACK for last sent packet. Stopping Timer at
196835.86416211422
Sliding window 1 times
New send_base: 15 send_end: 6
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 197028.00988799697  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197028.00988799697
generateNextArrival(): future time for event 1 at entity 0 will be
197050.41047395236
aOutput()_____
Send_Base: 15 Send_end: 6
NextSeqNo: 15
NextSeqNo is in send window
toLayer3: seqnum: 15  acknum: 0  checksum: -2016  payload:
ddddddddddddddddddddd
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197028.00988799697
```

Packet: 15 With Payload: dddddddddddddddddddd sent to B
Timer started at: 197028.01
Packet added to retransmission buffer at index [0]
Next sequence number: 0
_____

EVENT time: 197033.94701986745 type: 2 entity: 1
bInput() _____
Packet 15 received. rcv_base: 15   rcv_end: 6
Packet received is not corrupt. At time 197033.94701986745
Packet received is in order. Delivering packet(s) to layer5
Packet 15 Message dddddddddddddddddddd delivered to Layer 5
New rcv_base = 0   rcv_end = 7
toLayer3: seqnum: 0 acknum: 15 checksum: -16 payload:
toLayer3: scheduling arrival on other side
In order ACK 15 Sent

_____

EVENT time: 197039.50456251708 type: 2 entity: 0
aInput()_____
Current Send_Base: 15   Send_end: 6
Expected ACK 15 received
stopTimer: stopping timer at 197039.50456251708
Recieved ACK for last sent packet. Stopping Timer at
197039.50456251708
Sliding window 1 times
New send_base: 0 send_end: 7
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 197050.41047395236 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197050.41047395236
generateNextArrival(): future time for event 1 at entity 0 will be
197147.34946745192
aOutput()_____
Send_Base: 0 Send_end: 7
NextSeqNo: 0
NextSeqNo is in send window
toLayer3: seqnum: 0 acknum: 0 checksum: -2021 payload:
eeeeeeeeeeeeeeeeeeee
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197050.41047395236
Packet: 0 With Payload: eeeeeeeeeeeeeeeeeeee sent to B
Timer started at: 197050.41
Packet added to retransmission buffer at index [0]
Next sequence number: 1

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EVENT time: 197051.87960448003 type: 2 entity: 1
bInput() ————————————————————
Packet 0 received. rcv_base: 0   rcv_end: 7
Packet received is not corrupt. At time 197051.87960448003
Packet received is in order. Delivering packet(s) to layer5
Packet 0 Message eeeeeeeeeeeeeeeeeeee delivered to Layer 5
New rcv_base = 1   rcv_end = 8
toLayer3: seqnum: 0 acknum: 0 checksum: -1 payload:
toLayer3: scheduling arrival on other side
In order ACK 0 Sent

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EVENT time: 197057.0221259193 type: 2 entity: 0
aInput()————————————————————
Current Send_Base: 0   Send_end: 7
Expected ACK 0 received
stopTimer: stopping timer at 197057.0221259193
Recieved ACK for last sent packet. Stopping Timer at 197057.0221259193
Sliding window 1 times
New send_base: 1 send_end: 8
Number of messages waiting in buffer after ACK: 0

————————————————————

EVENT time: 197147.34946745192 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197147.34946745192
generateNextArrival(): future time for event 1 at entity 0 will be
197364.32386242246
aOutput()————————————————————
Send_Base: 1 Send_end: 8
NextSeqNo: 1
NextSeqNo is in send window
toLayer3: seqnum: 1 acknum: 0 checksum: -2042 payload:
ffffffffffffffffffff
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197147.34946745192
Packet: 1 With Payload: ffffffffffffffffffff sent to B
Timer started at: 197147.35
Packet added to retransmission buffer at index [0]
Next sequence number: 2

————————————————————

EVENT time: 197151.37437055566 type: 2 entity: 1
bInput() ————————————————————

Packet 1 received. rcv_base: 1   rcv_end: 8
Packet received is not corrupt. At time 197151.37437055566
Packet received is in order. Delivering packet(s) to layer5
Packet 1 Message ffffffffffffffffffff delivered to Layer 5
New rcv_base = 2   rcv_end = 9
toLayer3: seqnum: 0 acknum: 1 checksum: -2 payload:
toLayer3: scheduling arrival on other side
In order ACK 1 Sent

_____

EVENT time: 197157.64961699262 type: 2 entity: 0
aInput()_____
Current Send_Base: 1   Send_end: 8
Expected ACK 1 received
stopTimer: stopping timer at 197157.64961699262
Recieved ACK for last sent packet. Stopping Timer at
197157.64961699262
Sliding window 1 times
New send_base: 2 send_end: 9
Number of messages waiting in buffer after ACK: 0

_____

EVENT time: 197364.32386242246 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197364.32386242246
generateNextArrival(): future time for event 1 at entity 0 will be
197725.65080721446
aOutput()_____
Send_Base: 2 Send_end: 9
NextSeqNo: 2
NextSeqNo is in send window
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggg
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197364.32386242246
Packet: 2 With Payload: gggggggggggggggggggg sent to B
Timer started at: 197364.32
Packet added to retransmission buffer at index [0]
Next sequence number: 3

_____

EVENT time: 197372.5632496108 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 2   rcv_end: 9
Packet received is not corrupt. At time 197372.5632496108
Packet received is in order. Delivering packet(s) to layer5
Packet 2 Message gggggggggggggggggggg delivered to Layer 5

New rcv_base = 3   rcv_end = 10
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: packet being lost
In order ACK 2 Sent

_____

EVENT time: 197394.32386242246 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 197394.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
 gggggggggggggggggggggg
toLayer3: packet being lost
Retransmitting Packet 2
startTimer: starting timer at 197394.32386242246
Starting timer for packet 2 at time 197394.32386242246

_____

EVENT time: 197424.32386242246 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 197424.32
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 2 acknum: 0 checksum: -2063 payload:
gggggggggggggggggggggg
toLayer3: scheduling arrival on other side
Retransmitting Packet 2
startTimer: starting timer at 197424.32386242246
Starting timer for packet 2 at time 197424.32386242246

_____

EVENT time: 197429.89706106743 type: 2 entity: 1
bInput() _____
Packet 2 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 197429.89706106743
toLayer3: seqnum: 0 acknum: 2 checksum: -3 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK2 Sent

_____

EVENT time: 197432.81121250027 type: 2 entity: 0
aInput()_____
Current Send_Base: 2   Send_end: 9
Expected ACK 2 received
stopTimer: stopping timer at 197432.81121250027
Recieved ACK for last sent packet. Stopping Timer at
197432.81121250027

Sliding window 1 times
New send_base: 3 send_end: 10
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 197725.65080721446 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197725.65080721446
generateNextArrival(): future time for event 1 at entity 0 will be
197796.2950529495
aOutput()_____
Send_Base: 3 Send_end: 10
NextSeqNo: 3
NextSeqNo is in send window
toLayer3: seqnum: 3 acknum: 0 checksum: -2084 payload:
hhhhhhhhhhhhhhhhhhhh
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197725.65080721446
Packet: 3 With Payload: hhhhhhhhhhhhhhhhhhhh sent to B
Timer started at: 197725.65
Packet added to retransmission buffer at index [0]
Next sequence number: 4

_____

EVENT time: 197732.42210150446 type: 2 entity: 1
bInput() _____
Packet 3 received. rcv_base: 3   rcv_end: 10
Packet received is not corrupt. At time 197732.42210150446
Packet received is in order. Delivering packet(s) to layer5
Packet 3 Message hhhhhhhhhhhhhhhhhhhh delivered to Layer 5
New rcv_base = 4   rcv_end = 11
toLayer3: seqnum: 0 acknum: 3 checksum: -4 payload:
toLayer3: scheduling arrival on other side
In order ACK 3 Sent

_____

EVENT time: 197736.19431134974 type: 2 entity: 0
aInput()_____
Current Send_Base: 3   Send_end: 10
Expected ACK 3 received
stopTimer: stopping timer at 197736.19431134974
Recieved ACK for last sent packet. Stopping Timer at
197736.19431134974
Sliding window 1 times
New send_base: 4 send_end: 11
Number of messages waiting in buffer after ACK: 0

_____

```
EVENT time: 197796.2950529495  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 197796.2950529495
generateNextArrival(): future time for event 1 at entity 0 will be
197867.59849848924
aOutput()_____
Send_Base: 4 Send_end: 11
NextSeqNo: 4
NextSeqNo is in send window
toLayer3: seqnum: 4  acknum: 0  checksum: -2105  payload:
iiiiiiiiiiiiiiiiii
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197796.2950529495
Packet: 4 With Payload: iiiiiiiiiiiiiiiiii sent to B
Timer started at: 197796.30
Packet added to retransmission buffer at index [0]
Next sequence number: 5

_____


EVENT time: 197799.4640949735  type: 2  entity: 1
bInput() _____
Packet 4 received. rcv_base: 4      rcv_end: 11
Packet received is not corrupt. At time 197799.4640949735
Packet received is in order. Delivering packet(s) to layer5
Packet 4 Message iiiiiiiiiiiiiiiiii delivered to Layer 5
New rcv_base = 5     rcv_end = 12
toLayer3: seqnum: 0  acknum: 4  checksum: -5  payload:
toLayer3: scheduling arrival on other side
In order ACK 4 Sent

_____


EVENT time: 197807.60597552406  type: 2  entity: 0
aInput()_____
Current Send_Base: 4    Send_end: 11
Expected ACK 4 received
stopTimer: stopping timer at 197807.60597552406
Recieved ACK for last sent packet. Stopping Timer at
197807.60597552406
Sliding window 1 times
New send_base: 5 send_end: 12
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 197867.59849848924  type: 1  entity: 0
generateNextArrival(): called
```

generateNextArrival(): time is 197867.59849848924
generateNextArrival(): future time for event 1 at entity 0 will be
198059.401226844
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 5
NextSeqNo is in send window
toLayer3: seqnum: 5 acknum: 0 checksum: −2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
startTimer: starting timer at 197867.59849848924
Packet: 5 With Payload: jjjjjjjjjjjjjjjjjjjj sent to B
Timer started at: 197867.60
Packet added to retransmission buffer at index [0]
Next sequence number: 6

_____

EVENT time: 197874.79470198666 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 5   rcv_end: 12
Packet received is not corrupt. At time 197874.79470198666
Packet received is in order. Delivering packet(s) to layer5
Packet 5 Message jjjjjjjjjjjjjjjjjjjj delivered to Layer 5
New rcv_base = 6   rcv_end = 13
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
In order ACK 5 Sent

_____

EVENT time: 197879.24176763196 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Received Corrupted ACK
Number of Corruped Packets to A: 115.0

_____

EVENT time: 197897.59849848924 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 197897.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: −2126 payload:
jjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 197897.59849848924
Starting timer for packet 5 at time 197897.59849848924

———————————————————————

EVENT time: 197907.19885860765 type: 2 entity: 1
bInput() ——————————————————————————
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 197907.19885860765
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

———————————————————————

EVENT time: 197908.9445783867 type: 2 entity: 0
aInput()——————————————————————————
Current Send_Base: 5   Send_end: 12
Received Corrupted ACK
Number of Corruped Packets to A: 116.0

———————————————————————

EVENT time: 197927.59849848924 type: 0 entity: 0
aTimerInterrup()——————————————————————————
TIMEOUT!!! at: 197927.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 197927.59849848924
Starting timer for packet 5 at time 197927.59849848924

———————————————————————

EVENT time: 197957.59849848924 type: 0 entity: 0
aTimerInterrup()——————————————————————————
TIMEOUT!!! at: 197957.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 197957.59849848924
Starting timer for packet 5 at time 197957.59849848924

———————————————————————

EVENT time: 197966.32102420108 type: 2 entity: 1
bInput() ——————————————————————————

Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 197966.32102420108
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being lost
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 197987.59849848924 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 197987.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 197987.59849848924
Starting timer for packet 5 at time 197987.59849848924

_____

EVENT time: 197988.67677846606 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 197988.67677846606
toLayer3: seqnum: 0 acknum: 5 checksum: -6 payload:
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 197991.6914578691 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12
Received Corrupted ACK
Number of Corruped Packets to A: 117.0

_____

EVENT time: 198017.59849848924 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 198017.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: -2126 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: packet being lost
Retransmitting Packet 5
startTimer: starting timer at 198017.59849848924
Starting timer for packet 5 at time 198017.59849848924

_____

EVENT time: 198047.59849848924 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 198047.60
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 5 acknum: 0 checksum: −2126 payload:
jjjjjjjjjjjjjjjjjjjjj
toLayer3: scheduling arrival on other side
Retransmitting Packet 5
startTimer: starting timer at 198047.59849848924
Starting timer for packet 5 at time 198047.59849848924

_____

EVENT time: 198056.56959746077 type: 2 entity: 1
bInput() _____
Packet 5 received. rcv_base: 6   rcv_end: 13
Packet received is not corrupt. At time 198056.56959746077
toLayer3: seqnum: 0 acknum: 5 checksum: −6 payload:
toLayer3: scheduling arrival on other side
Packet received is outside of window. ACK5 Sent

_____

EVENT time: 198059.401226844 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 198059.401226844
generateNextArrival(): future time for event 1 at entity 0 will be
198266.41438032157
aOutput()_____
Send_Base: 5 Send_end: 12
NextSeqNo: 6
NextSeqNo is in send window
toLayer3: seqnum: 6 acknum: 0 checksum: −2147 payload:
kkkkkkkkkkkkkkkkkkkkk
toLayer3: packet being lost
stopTimer: stopping timer at 198059.401226844
startTimer: starting timer at 198059.401226844
Packet: 6 With Payload: kkkkkkkkkkkkkkkkkkkkk sent to B
Timer started at: 198059.40
Packet added to retransmission buffer at index [1]
Next sequence number: 7

_____

EVENT time: 198065.33771782578 type: 2 entity: 0
aInput()_____
Current Send_Base: 5   Send_end: 12

Expected ACK 5 received
Sliding window 1 times
New send_base: 6 send_end: 13
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 198089.401226844 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 198089.40
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkk
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 198089.401226844
Starting timer for packet 6 at time 198089.401226844

_____

EVENT time: 198097.33436078974 type: 2 entity: 1
bInput() _____
Packet 6 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 198119.401226844 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 198119.40
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6 acknum: 0 checksum: -2147 payload:
kkkkkkkkkkkkkkkkkkk
toLayer3: packet being corrupted
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 198119.401226844
Starting timer for packet 6 at time 198119.401226844

_____

EVENT time: 198125.68993194363 type: 2 entity: 1
bInput() _____
Packet 999999 received. rcv_base: 6   rcv_end: 13
Packet received is corrupted. Discarding and ignoring packet

_____

EVENT time: 198149.401226844 type: 0 entity: 0

```
aTimerInterrup()_____
TIMEOUT!!! at: 198149.40
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 6  acknum: 0  checksum: -2147  payload:
kkkkkkkkkkkkkkkkkkkk
toLayer3: scheduling arrival on other side
Retransmitting Packet 6
startTimer: starting timer at 198149.401226844
Starting timer for packet 6 at time 198149.401226844

_____


EVENT time: 198153.48738059626  type: 2  entity: 1
bInput() _____
Packet 6 received. rcv_base: 6       rcv_end: 13
Packet received is not corrupt. At time 198153.48738059626
Packet received is in order. Delivering packet(s) to layer5
Packet 6 Message kkkkkkkkkkkkkkkkkkkk delivered to Layer 5
New rcv_base = 7      rcv_end = 14
toLayer3: seqnum: 0  acknum: 6  checksum: -7  payload:
toLayer3: scheduling arrival on other side
In order ACK 6 Sent

_____


EVENT time: 198162.41453291415  type: 2  entity: 0
aInput()_____
Current Send_Base: 6    Send_end: 13
Expected ACK 6 received
stopTimer: stopping timer at 198162.41453291415
Recieved ACK for last sent packet. Stopping Timer at
198162.41453291415
Sliding window 1 times
New send_base: 7 send_end: 14
Number of messages waiting in buffer after ACK: 0

_____


EVENT time: 198266.41438032157  type: 1  entity: 0
generateNextArrival(): called
generateNextArrival(): time is 198266.41438032157
generateNextArrival(): future time for event 1 at entity 0 will be
198414.69771416354
aOutput()_____
Send_Base: 7 Send_end: 14
NextSeqNo: 7
NextSeqNo is in send window
toLayer3: seqnum: 7  acknum: 0  checksum: -2168  payload:
llllllllllllllllllll
toLayer3: packet being lost
```

startTimer: starting timer at 198266.41438032157
Packet: 7 With Payload: lllllllllllllllllll sent to B
Timer started at: 198266.41
Packet added to retransmission buffer at index [0]
Next sequence number: 8
_____

EVENT time: 198296.41438032157 type: 0 entity: 0
aTimerInterrup()_____
TIMEOUT!!! at: 198296.41
Retransmitting every packet since last ACK'd
toLayer3: seqnum: 7 acknum: 0 checksum: -2168 payload:
lllllllllllllllllll
toLayer3: scheduling arrival on other side
Retransmitting Packet 7
startTimer: starting timer at 198296.41438032157
Starting timer for packet 7 at time 198296.41438032157
_____

EVENT time: 198299.4392223883 type: 2 entity: 1
bInput() _____
Packet 7 received. rcv_base: 7   rcv_end: 14
Packet received is not corrupt. At time 198299.4392223883
Packet received is in order. Delivering packet(s) to layer5
Packet 7 Message lllllllllllllllllll delivered to Layer 5
New rcv_base = 8   rcv_end = 15
toLayer3: seqnum: 0 acknum: 7 checksum: -8 payload:
toLayer3: scheduling arrival on other side
In order ACK 7 Sent
_____

EVENT time: 198305.16376232175 type: 2 entity: 0
aInput()_____
Current Send_Base: 7   Send_end: 14
Expected ACK 7 received
stopTimer: stopping timer at 198305.16376232175
Recieved ACK for last sent packet. Stopping Timer at
198305.16376232175
Sliding window 1 times
New send_base: 8 send_end: 15
Number of messages waiting in buffer after ACK: 0
_____

EVENT time: 198414.69771416354 type: 1 entity: 0
generateNextArrival(): called
generateNextArrival(): time is 198414.69771416354

```
generateNextArrival(): future time for event 1 at entity 0 will be
198541.20303964344
Simulator terminated at time 198414.69771416354


===============STATISTICS======================
Number of original packets transmitted by A: 1000
Number of retransmissions by A: 500
Number of data packets delivered to layer 5 at B: 1000
Number of ACK packets sent by B: 1234
Number of corrupted packets: 232.0
Ratio of lost packets: 0.0980248719824433
Ratio of corrupted packets: 0.09407948094079481
Average RTT: 10.824932032939111
Average communication time: 24.465704074385748
==================================================

EXTRA:
dhcp-wifi-8021x-155-41-119-170:PA-2 Darren$
```