


VERSION 1.0
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Reliable Transport Protocol

CSE 335: COMPUTER NETWORKS
COURSE PROJECT

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RELIABLE TRANSPORT PROTOCOL (FROM J.F. KUROSE)

INTRODUCTION

Project is divided into 2 parts, Alternating-Bit-Protocol version and the second part for the Go-Back-N version.

For further info, please check out the README.md file which includes everything about the project including an overview, introduction, guidelines, and usage.

DESCRIPTION OF FUNCTIONS

A_output(message), where message is a structure of type msg, containing data to be sent to the B-side. This routine will be called whenever the upper layer at the sending side (A) has a message to send. It is the job of your protocol to ensure that the data in such a message is delivered in-order, and correctly, to the receiving side upper layer.

A_input(packet), where packet is a structure of type pkt. This routine will be called whenever a packet sent from the B-side (i.e., as a result of a tolayer3() being done by a B-side procedure) arrives at the A-side. packet is the (possibly corrupted) packet sent from the B-side.

A_timerinterrupt() This routine will be called when A's timer expires (thus generating a timer interrupt). You'll probably want to use this routine to control the retransmission of packets. See starttimer() and stoptimer() below for how the timer is started and stopped.

A_init() This routine will be called once, before any of your other A-side routines are called. It can be used to do any required initialization.

B_input(packet), where packet is a structure of type pkt. This routine will be called whenever a packet sent from the A-side (i.e., as a result of a tolayer3() being done by a A-side procedure) arrives at the B-side. packet is the (possibly corrupted) packet sent from the A-side.

B_init() This routine will be called once, before any of your other B-side routines are called. It can be used to do any required initialization.

OUTPUT

ALTERNATING BIT PROTOCOL

A)	No loss and no error scenario to demonstrate that your code works under no error case
	λ ./a.exe 10 0 0 5 0

	<p>----- Stop and Wait Network Simulator Version 1.1 -----</p> <p>the number of messages to simulate: 10</p> <p>packet loss probability: 0.000000</p> <p>packet corruption probability: 0.000000</p> <p>average time between messages from sender's layer5: 5.000000</p> <p>TRACE: 0</p> <p>A_output: send packet: aaaaaaaaaaaaaaaaaa</p> <p>B_input: rcv message: aaaaaaaaaaaaaaaaaa</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: bbbbbbbbbbbbbbbbbbbb</p> <p>A_input: acked.</p> <p>A_output: send packet: cccccccccccccccccc</p> <p>B_input: rcv message: cccccccccccccccccc</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: dddddddddddddddddddd</p> <p>A_output: not yet acked. drop the message: eeeeeeeeeeeeeeeeeeee</p> <p>A_input: acked.</p> <p>A_output: send packet: ffffffffffffffffffff</p> <p>B_input: rcv message: ffffffffffffffffffff</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: gggggggggggggggggggg</p> <p>A_output: not yet acked. drop the message: hhhhhhhhhhhhhhhhhhhh</p> <p>A_input: acked.</p> <p>A_output: send packet: iiiiiiiiiiiiiiiiii</p> <p>B_input: rcv message: iiiiiiiiiiiiiiiiii</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: jjjjjjjjjjjjjjjjjj</p> <p>A_input: acked.</p> <p>Simulator terminated at time 47.591816</p> <p>after sending 10 msgs from layer5</p>
B)	30 percent loss and no error scenario to demonstrate your code can recover the lossd packets

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λ ./a.exe 50 0.3 0 10 0
----- Stop and Wait Network Simulator Version 1.1 -----

the number of messages to simulate: 50
packet loss probability: 0.300000
packet corruption probability: 0.000000
average time between messages from sender's layer5: 10.000000
TRACE: 0
A_output: send packet: aaaaaaaaaaaaaaaaaa
B_input: rcv message: aaaaaaaaaaaaaaaaaa
B_input: send ACK.
A_input: acked.
A_output: send packet: bbbbbbbbbbbbbbbbbbbb
B_input: rcv message: bbbbbbbbbbbbbbbbbbbb
B_input: send ACK.
A_input: acked.
A_output: send packet: cccccccccccccccccc
B_input: rcv message: cccccccccccccccccc
B_input: send ACK.
A_input: acked.
A_output: send packet: dddddddddddddddddd
B_input: rcv message: dddddddddddddddddd
B_input: send ACK.
A_input: acked.
A_output: send packet: eeeeeeeeeeeeeeeeeeee
B_input: rcv message: eeeeeeeeeeeeeeeeeeee
B_input: send ACK.
A_output: not yet acked. drop the message: ffffffffffffffffffff
A_timerinterrupt: resend last packet: eeeeeeeeeeeeeeeeeeee.
A_output: not yet acked. drop the message: gggggggggggggggggggggg
A_output: not yet acked. drop the message: hhhhhhhhhhhhhhhhhhhh
B_input: not the expected seq. send NAK.
A_timerinterrupt: resend last packet: eeeeeeeeeeeeeeeeeeee.

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	<p>A_output: not yet acked. drop the message: iiiiiiiiiiiiiiiii</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_output: not yet acked. drop the message: jjjjjjjjjjjjjjjjjj</p> <p>A_input: acked.</p> <p>A_output: send packet: kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend last packet: kkkkkkkkkkkkkkkkkk.</p> <p>A_output: not yet acked. drop the message: llllllllllllllllll</p> <p>A_output: not yet acked. drop the message: mmmmmmmmmmmmmmmmmmm</p> <p>B_input: recv message: kkkkkkkkkkkkkkkkkk</p> <p>B_input: send ACK.</p> <p>A_input: acked.</p> <p>A_output: send packet: nnnnnnnnnnnnnnnnnnn</p> <p>B_input: recv message: nnnnnnnnnnnnnnnnnnn</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: ooooooooooooooooooooo</p> <p>A_input: acked.</p> <p>A_output: send packet: ppppppppppppppppppp</p> <p>B_input: recv message: ppppppppppppppppppp</p> <p>B_input: send ACK.</p> <p>A_input: acked.</p> <p>A_output: send packet: qqqqqqqqqqqqqqqqqq</p> <p>A_output: not yet acked. drop the message: rrrrrrrrrrrrrrrrrr</p> <p>A_output: not yet acked. drop the message: ssssssssssssssssss</p> <p>A_output: not yet acked. drop the message: tttttttttttttttt</p> <p>B_input: recv message: qqqqqqqqqqqqqqqqqq</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: uuuuuuuuuuuuuuuuuu</p> <p>A_input: acked.</p> <p>A_output: send packet: vvvvvvvvvvvvvvvvvv</p> <p>A_output: not yet acked. drop the message: wwwwwwwwwwwwwwwwww</p> <p>A_output: not yet acked. drop the message: xxxxxxxxxxxxxxxxxxxx</p> <p>A_output: not yet acked. drop the message: yyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvvv.</p>
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	<p>A_output: not yet acked. drop the message: zzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>A_output: not yet acked. drop the message: aaaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>A_output: not yet acked. drop the message: bbbbbbbbbbbbbbbbbbb</p> <p>B_input: recv message: vvvvvvvvvvvvvvvvv</p> <p>B_input: send ACK.</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>A_output: not yet acked. drop the message: ccccccccccccccccc</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_input: acked.</p> <p>A_output: send packet: ddddddddddddddddd</p> <p>B_input: recv message: ddddddddddddddddd</p> <p>B_input: send ACK.</p> <p>A_timerinterrupt: resend last packet: ddddddddddddddddd.</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_output: not yet acked. drop the message: eeeeeeeeeeeeeeeee</p> <p>A_input: acked.</p> <p>A_output: send packet: fffffffffffffffff</p> <p>A_output: not yet acked. drop the message: ggggggggggggggggg</p> <p>A_timerinterrupt: resend last packet: fffffffffffffffff.</p> <p>A_output: not yet acked. drop the message: hhhhhhhhhhhhhhhhh</p> <p>A_output: not yet acked. drop the message: iiiiiiiiiiiiiii</p> <p>A_output: not yet acked. drop the message: jjjjjjjjjjjjjjjjj</p> <p>B_input: recv message: fffffffffffffffff</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: kkkkkkkkkkkkkkkkk</p> <p>A_input: acked.</p> <p>A_output: send packet: llllllllllllll</p> <p>A_timerinterrupt: resend last packet: llllllllllllll.</p> <p>A_output: not yet acked. drop the message: mmmmmmmmmmmmmmmmm</p> <p>B_input: recv message: llllllllllllll</p> <p>B_input: send ACK.</p>
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	<p>A_timerinterrupt: resend last packet: llllllllllllll.</p> <p>A_output: not yet acked. drop the message: nnnnnnnnnnnnnnnnnnn</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_timerinterrupt: resend last packet: llllllllllllll.</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_output: not yet acked. drop the message: ooooooooooooooooooooo</p> <p>A_input: acked.</p> <p>A_output: send packet: ppppppppppppppppppp</p> <p>B_input: recv message: ppppppppppppppppppp</p> <p>B_input: send ACK.</p> <p>A_timerinterrupt: resend last packet: ppppppppppppppppppp.</p> <p>A_output: not yet acked. drop the message: qqqqqqqqqqqqqqqqqqq</p> <p>A_output: not yet acked. drop the message: rrrrrrrrrrrrrrrrrrr</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_input: acked.</p> <p>A_output: send packet: ssssssssssssssssss</p> <p>B_input: recv message: ssssssssssssssssss</p> <p>B_input: send ACK.</p> <p>A_input: acked.</p> <p>A_output: send packet: tttttttttttttttt</p> <p>A_output: not yet acked. drop the message: uuuuuuuuuuuuuuuuuuu</p> <p>B_input: recv message: tttttttttttttttt</p> <p>B_input: send ACK.</p> <p>A_input: acked.</p> <p>A_output: send packet: vvvvvvvvvvvvvvvvvv</p> <p>A_output: not yet acked. drop the message: wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>A_output: not yet acked. drop the message: xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>A_timerinterrupt: resend last packet: vvvvvvvvvvvvvvvvv.</p> <p>B_input: recv message: vvvvvvvvvvvvvvvvv</p> <p>B_input: send ACK.</p> <p>A_input: acked.</p>
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	<p>Simulator terminated at time 507.020447 after sending 50 msg's from layer5</p>
C)	<p>No loss and 30 percent corruption scenario to demonstrate your code can recover the erroneously received packets</p>
	<pre> λ ./a.exe 10 0 0.3 10 0 ----- Stop and Wait Network Simulator Version 1.1 ----- the number of messages to simulate: 10 packet loss probability: 0.000000 packet corruption probability: 0.300000 average time between messages from sender's layer5: 10.000000 TRACE: 0 A_output: send packet: aaaaaaaaaaaaaaaaaa B_input: rcv message: aaaaaaaaaaaaaaaaaa B_input: send ACK. A_input: acked. A_output: send packet: bbbbbbbbbbbbbbbbbbbb B_input: rcv message: bbbbbbbbbbbbbbbbbbbb B_input: send ACK. A_input: acked. A_output: send packet: cccccccccccccccccc B_input: rcv message: cccccccccccccccccc B_input: send ACK. A_input: acked. A_output: send packet: dddddddddddddddddd B_input: packet corrupted. send NAK. A_input: not the expected ACK. drop. A_timerinterrupt: resend last packet: dddddddddddddddddd. A_output: not yet acked. drop the message: eeeeeeeeeeeeeeeeeeee A_output: not yet acked. drop the message: ffffffffffffffffffff B_input: rcv message: dddddddddddddddddd B_input: send ACK. A_output: not yet acked. drop the message: gggggggggggggggggggg </pre>

	<p>A_input: acked.</p> <p>A_output: send packet: hhhhhhhhhhhhhhhhhh</p> <p>B_input: recv message: hhhhhhhhhhhhhhhhhh</p> <p>B_input: send ACK.</p> <p>A_output: not yet acked. drop the message: iiiiiiiiiiiiiiiii</p> <p>A_input: acked.</p> <p>A_output: send packet: jjjjjjjjjjjjjjjjjj</p> <p>B_input: recv message: jjjjjjjjjjjjjjjjjj</p> <p>B_input: send ACK.</p> <p>A_timerinterrupt: resend last packet: jjjjjjjjjjjjjjjjjj.</p> <p>A_input: acked.</p> <p>B_input: not the expected seq. send NAK.</p> <p>A_input: A->B only. drop.</p> <p>Simulator terminated at time 117.520515 after sending 10 msgs from layer5</p>
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GO-BACK-N

A)	No loss and no error scenario to demonstrate that your code works under no error case
	<pre> λ ./a.exe 10 0 0 5 0 ----- Stop and Wait Network Simulator Version 1.1 ----- the number of messages to simulate: 10 packet loss probability: 0.000000 packet corruption probability: 0.000000 average time between messages from sender's layer5: 5.000000 TRACE: 0 A_output: buffered packet (seq=1): aaaaaaaaaaaaaaaaaa send_window: send packet (seq=1): aaaaaaaaaaaaaaaaaa B_input: recv packet (seq=1): aaaaaaaaaaaaaaaaaa B_input: send ACK (ack=1) A_output: buffered packet (seq=2): bbbbbbbbbbbbbbbbbbb send_window: send packet (seq=2): bbbbbbbbbbbbbbbbbbb </pre>

<p>A_input: got ACK (ack=1)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=2): bbbbbbbbbbbbbbbbbbbb</p> <p>B_input: send ACK (ack=2)</p> <p>A_output: buffered packet (seq=3): cccccccccccccccccc</p> <p>send_window: send packet (seq=3): cccccccccccccccccc</p> <p>A_input: got ACK (ack=2)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=3): cccccccccccccccccc</p> <p>B_input: send ACK (ack=3)</p> <p>A_timerinterrupt: resend packet (seq=3): cccccccccccccccccc</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=4): dddddddddddddddddddd</p> <p>send_window: send packet (seq=4): dddddddddddddddddddd</p> <p>A_input: got ACK (ack=3)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=5): eeeeeeeeeeeeeeeeeeee</p> <p>send_window: send packet (seq=5): eeeeeeeeeeeeeeeeeeee</p> <p>B_input: not the expected seq. send NAK (ack=3)</p> <p>A_output: buffered packet (seq=6): ffffffffffffffffffff</p> <p>send_window: send packet (seq=6): ffffffffffffffffffff</p> <p>A_input: got NAK (ack=3). drop.</p> <p>B_input: recv packet (seq=4): dddddddddddddddddddd</p> <p>B_input: send ACK (ack=4)</p> <p>A_timerinterrupt: resend packet (seq=4): dddddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=5): eeeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=6): ffffffffffffffffffff</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=7): gggggggggggggggggggg</p> <p>send_window: send packet (seq=7): gggggggggggggggggggg</p>
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<p> B_input: recv packet (seq=5): eeeeeeeeeeeeeeeeeee B_input: send ACK (ack=5) A_output: buffered packet (seq=8): hhhhhhhhhhhhhhhhhhh send_window: send packet (seq=8): hhhhhhhhhhhhhhhhhhh B_input: recv packet (seq=6): ffffffffffffffffff B_input: send ACK (ack=6) A_input: got ACK (ack=4) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: not the expected seq. send NAK (ack=6) A_output: buffered packet (seq=9): iiiiiiiiiiiiiiiii send_window: send packet (seq=9): iiiiiiiiiiiiiiiii B_input: not the expected seq. send NAK (ack=6) B_input: not the expected seq. send NAK (ack=6) A_timerinterrupt: resend packet (seq=5): eeeeeeeeeeeeeeeeeee A_timerinterrupt: resend packet (seq=6): ffffffffffffffffff A_timerinterrupt: resend packet (seq=7): gggggggggggggggggggg A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhh A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii A_timerinterrupt: timer + 15.000000 B_input: recv packet (seq=7): gggggggggggggggggggg B_input: send ACK (ack=7) A_input: got ACK (ack=5) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: recv packet (seq=8): hhhhhhhhhhhhhhhhhhh B_input: send ACK (ack=8) A_output: buffered packet (seq=10): jjjjjjjjjjjjjjjjjj send_window: send packet (seq=10): jjjjjjjjjjjjjjjjjj A_input: got ACK (ack=6) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: recv packet (seq=9): iiiiiiiiiiiiiiiii </p>
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	<p>B_input: send ACK (ack=9)</p> <p>A_timerinterrupt: resend packet (seq=7): gggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=9)</p> <p>A_input: got NAK (ack=6). drop.</p> <p>A_input: got NAK (ack=6). drop.</p> <p>B_input: not the expected seq. send NAK (ack=9)</p> <p>A_input: got NAK (ack=6). drop.</p> <p>B_input: not the expected seq. send NAK (ack=9)</p> <p>A_timerinterrupt: resend packet (seq=7): gggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got ACK (ack=7)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got ACK (ack=8)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=9)</p> <p>B_input: not the expected seq. send NAK (ack=9)</p> <p>A_input: got ACK (ack=9)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got NAK (ack=9). drop.</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=9). drop.</p> <p>B_input: recv packet (seq=10): jjjjjjjjjjjjjjjj</p>
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----- Stop and Wait Network Simulator Version 1.1 -----

the number of messages to simulate: 50

packet loss probability: 0.300000

packet corruption probability: 0.000000

average time between messages from sender's layer5: 10.000000

TRACE: 0

A_output: buffered packet (seq=1): aaaaaaaaaaaaaaaaaa

send_window: send packet (seq=1): aaaaaaaaaaaaaaaaaa

B_input: recv packet (seq=1): aaaaaaaaaaaaaaaaaa

B_input: send ACK (ack=1)

A_input: got ACK (ack=1)

A_input: stop timer

A_output: buffered packet (seq=2): bbbbbbbbbbbbbbbbbbb

send_window: send packet (seq=2): bbbbbbbbbbbbbbbbbbb

B_input: recv packet (seq=2): bbbbbbbbbbbbbbbbbbb

B_input: send ACK (ack=2)

A_input: got ACK (ack=2)

A_input: stop timer

A_output: buffered packet (seq=3): ccccccccccccccccc

send_window: send packet (seq=3): ccccccccccccccccc

B_input: recv packet (seq=3): ccccccccccccccccc

B_input: send ACK (ack=3)

A_input: got ACK (ack=3)

A_input: stop timer

A_output: buffered packet (seq=4): ddddddddddddddddd

send_window: send packet (seq=4): ddddddddddddddddd

B_input: recv packet (seq=4): ddddddddddddddddd

B_input: send ACK (ack=4)

A_input: got ACK (ack=4)

A_input: stop timer

A_output: buffered packet (seq=5): eeeeeeeeeeeeeeeee

send_window: send packet (seq=5): eeeeeeeeeeeeeeeee

	<p>B_input: recv packet (seq=5): eeeeeeeeeeeeeeeeeee</p> <p>B_input: send ACK (ack=5)</p> <p>A_output: buffered packet (seq=6): ffffffffffffffff</p> <p>send_window: send packet (seq=6): ffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=5): eeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=6): ffffffffffffffff</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: recv packet (seq=6): ffffffffffffffff</p> <p>B_input: send ACK (ack=6)</p> <p>B_input: not the expected seq. send NAK (ack=6)</p> <p>A_output: buffered packet (seq=7): gggggggggggggggggggg</p> <p>send_window: send packet (seq=7): gggggggggggggggggggg</p> <p>A_input: got ACK (ack=6)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=7): gggggggggggggggggggg</p> <p>B_input: send ACK (ack=7)</p> <p>A_input: got NAK (ack=6). drop.</p> <p>A_timerinterrupt: resend packet (seq=7): gggggggggggggggggggg</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>send_window: send packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>B_input: not the expected seq. send NAK (ack=7)</p> <p>A_input: got ACK (ack=7)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>B_input: send ACK (ack=8)</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>send_window: send packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>A_input: got ACK (ack=8)</p>
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	Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: not the expected seq. send NAK (ack=8) A_input: got NAK (ack=8). drop. A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii A_timerinterrupt: timer + 15.000000 B_input: recv packet (seq=9): iiiiiiiiiiiiiiiii B_input: send ACK (ack=9) A_output: buffered packet (seq=10): jjjjjjjjjjjjjjjjjj send_window: send packet (seq=10): jjjjjjjjjjjjjjjjjj B_input: not the expected seq. send NAK (ack=9) B_input: recv packet (seq=10): jjjjjjjjjjjjjjjjjj B_input: send ACK (ack=10) A_output: buffered packet (seq=11): kkkkkkkkkkkkkkkkkk send_window: send packet (seq=11): kkkkkkkkkkkkkkkkkk B_input: recv packet (seq=11): kkkkkkkkkkkkkkkkkk B_input: send ACK (ack=11) A_output: buffered packet (seq=12): llllllllllllllllll send_window: send packet (seq=12): llllllllllllllllll A_input: got ACK (ack=9) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 A_output: buffered packet (seq=13): mmmmmmmmmmmmmmmmmmm send_window: send packet (seq=13): mmmmmmmmmmmmmmmmmmm A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj A_timerinterrupt: resend packet (seq=11): kkkkkkkkkkkkkkkkkk A_timerinterrupt: resend packet (seq=12): llllllllllllllllll A_timerinterrupt: resend packet (seq=13): mmmmmmmmmmmmmmmmmmm A_timerinterrupt: timer + 15.000000 B_input: recv packet (seq=12): llllllllllllllllll B_input: send ACK (ack=12) B_input: not the expected seq. send NAK (ack=12) A_input: got ACK (ack=12)
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	Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: not the expected seq. send NAK (ack=12) A_output: buffered packet (seq=14): nnnnnnnnnnnnnnnnnnn send_window: send packet (seq=14): nnnnnnnnnnnnnnnnnnn A_timerinterrupt: resend packet (seq=13): mmmmmmmmmmmmmmmmmmm A_timerinterrupt: resend packet (seq=14): nnnnnnnnnnnnnnnnnnn A_timerinterrupt: timer + 15.000000 B_input: rcv packet (seq=13): mmmmmmmmmmmmmmmmmmm B_input: send ACK (ack=13) A_input: got NAK (ack=12). drop. B_input: rcv packet (seq=14): nnnnnnnnnnnnnnnnnnn B_input: send ACK (ack=14) B_input: not the expected seq. send NAK (ack=14) A_output: buffered packet (seq=15): ooooooooooooooooooooo send_window: send packet (seq=15): ooooooooooooooooooooo A_output: buffered packet (seq=16): ppppppppppppppppppp send_window: send packet (seq=16): ppppppppppppppppppp A_input: got ACK (ack=14) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 A_timerinterrupt: resend packet (seq=15): ooooooooooooooooooooo A_timerinterrupt: resend packet (seq=16): ppppppppppppppppppp A_timerinterrupt: timer + 15.000000 B_input: rcv packet (seq=15): ooooooooooooooooooooo B_input: send ACK (ack=15) A_input: got ACK (ack=15) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: rcv packet (seq=16): ppppppppppppppppppp B_input: send ACK (ack=16) A_input: got ACK (ack=16) A_input: stop timer
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	<p>B_input: not the expected seq. send NAK (ack=16)</p> <p>A_output: buffered packet (seq=17): qqqqqqqqqqqqqqqqqqq</p> <p>send_window: send packet (seq=17): qqqqqqqqqqqqqqqqqqq</p> <p>A_input: got NAK (ack=16). drop.</p> <p>B_input: recv packet (seq=17): qqqqqqqqqqqqqqqqqqq</p> <p>B_input: send ACK (ack=17)</p> <p>A_timerinterrupt: resend packet (seq=17): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=18): rrrrrrrrrrrrrrrrr</p> <p>send_window: send packet (seq=18): rrrrrrrrrrrrrrrrr</p> <p>A_output: buffered packet (seq=19): sssssssssssssssss</p> <p>send_window: send packet (seq=19): sssssssssssssssss</p> <p>B_input: not the expected seq. send NAK (ack=17)</p> <p>A_output: buffered packet (seq=20): ttttttttttttttt</p> <p>send_window: send packet (seq=20): ttttttttttttttt</p> <p>B_input: recv packet (seq=18): rrrrrrrrrrrrrrrrr</p> <p>B_input: send ACK (ack=18)</p> <p>A_timerinterrupt: resend packet (seq=17): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=18): rrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=19): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=20): ttttttttttttttt</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=21): uuuuuuuuuuuuuuuuu</p> <p>send_window: send packet (seq=21): uuuuuuuuuuuuuuuuu</p> <p>B_input: recv packet (seq=19): sssssssssssssssss</p> <p>B_input: send ACK (ack=19)</p> <p>A_input: got ACK (ack=17)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=19)</p> <p>A_input: got ACK (ack=18)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p>
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<p> A_output: buffered packet (seq=22): vvvvvvvvvvvvvvvvvv send_window: send packet (seq=22): vvvvvvvvvvvvvvvvvv B_input: not the expected seq. send NAK (ack=19) A_timerinterrupt: resend packet (seq=19): ssssssssssssssssss A_timerinterrupt: resend packet (seq=20): tttttttttttttttt A_timerinterrupt: resend packet (seq=21): uuuuuuuuuuuuuuuuuu A_timerinterrupt: resend packet (seq=22): vvvvvvvvvvvvvvvvvv A_timerinterrupt: timer + 15.000000 B_input: not the expected seq. send NAK (ack=19) A_input: got ACK (ack=19) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: recv packet (seq=20): tttttttttttttttt B_input: send ACK (ack=20) A_output: buffered packet (seq=23): wwwwwwwwwwwwwwwwwww send_window: send packet (seq=23): wwwwwwwwwwwwwwwwwww B_input: recv packet (seq=21): uuuuuuuuuuuuuuuuuu B_input: send ACK (ack=21) A_input: got ACK (ack=20) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 A_output: buffered packet (seq=24): xxxxxxxxxxxxxxxxxxxx send_window: send packet (seq=24): xxxxxxxxxxxxxxxxxxxx B_input: recv packet (seq=22): vvvvvvvvvvvvvvvvvv B_input: send ACK (ack=22) A_output: buffered packet (seq=25): yyyyyyyyyyyyyyyyyy send_window: send packet (seq=25): yyyyyyyyyyyyyyyyyy A_timerinterrupt: resend packet (seq=21): uuuuuuuuuuuuuuuuuu A_timerinterrupt: resend packet (seq=22): vvvvvvvvvvvvvvvvvv A_timerinterrupt: resend packet (seq=23): wwwwwwwwwwwwwwwwwww A_timerinterrupt: resend packet (seq=24): xxxxxxxxxxxxxxxxxxxx A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyy A_timerinterrupt: timer + 15.000000 </p>

	<p>A_input: got ACK (ack=21)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got ACK (ack=22)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=22)</p> <p>A_input: got NAK (ack=22). drop.</p> <p>A_output: buffered packet (seq=26): zzzzzzzzzzzzzzzzzzz</p> <p>send_window: send packet (seq=26): zzzzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=23): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: resend packet (seq=24): xxxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=22)</p> <p>B_input: not the expected seq. send NAK (ack=22)</p> <p>A_output: buffered packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>send_window: send packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>A_input: got NAK (ack=22). drop.</p> <p>B_input: not the expected seq. send NAK (ack=22)</p> <p>B_input: recv packet (seq=23): wwwwwwwwwwwwwwwwwwwww</p> <p>B_input: send ACK (ack=23)</p> <p>B_input: not the expected seq. send NAK (ack=23)</p> <p>A_timerinterrupt: resend packet (seq=23): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: resend packet (seq=24): xxxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=23)</p> <p>A_input: got ACK (ack=23)</p> <p>Warning: attempt to start a timer that is already started</p>
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	<p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>send_window: send packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>B_input: not the expected seq. send NAK (ack=23)</p> <p>B_input: not the expected seq. send NAK (ack=23)</p> <p>A_output: buffered packet (seq=29): ccccccccccccccccc</p> <p>send_window: send packet (seq=29): ccccccccccccccccc</p> <p>A_input: got NAK (ack=23). drop.</p> <p>A_timerinterrupt: resend packet (seq=24): xxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): ccccccccccccccccc</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=23)</p> <p>B_input: rcv packet (seq=24): xxxxxxxxxxxxxxxxxxx</p> <p>B_input: send ACK (ack=24)</p> <p>A_input: got NAK (ack=23). drop.</p> <p>B_input: not the expected seq. send NAK (ack=24)</p> <p>A_output: buffered packet (seq=30): dddddddddddddddddd</p> <p>send_window: send packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=24): xxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): ccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=24)</p> <p>A_input: got ACK (ack=24)</p> <p>Warning: attempt to start a timer that is already started</p>
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	<p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=24)</p> <p>A_input: got NAK (ack=24). drop.</p> <p>A_input: got NAK (ack=24). drop.</p> <p>B_input: recv packet (seq=25): yyyyyyyyyyyyyyyyyyy</p> <p>B_input: send ACK (ack=25)</p> <p>A_output: buffered packet (seq=31): eeeeeeeeeeeeeeeeeee</p> <p>send_window: send packet (seq=31): eeeeeeeeeeeeeeeeeee</p> <p>A_input: got NAK (ack=24). drop.</p> <p>A_timerinterrupt: resend packet (seq=25): yyyyyyyyyyyyyyyyyyy</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): ccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): ddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: recv packet (seq=26): zzzzzzzzzzzzzzzzz</p> <p>B_input: send ACK (ack=26)</p> <p>A_input: got ACK (ack=25)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=26)</p> <p>A_output: buffered packet (seq=32): fffffffffffffffff</p> <p>send_window: send packet (seq=32): fffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=26): zzzzzzzzzzzzzzzzz</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): ccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): ddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=32): fffffffffffffffff</p> <p>A_timerinterrupt: timer + 15.000000</p>
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	<p>B_input: not the expected seq. send NAK (ack=26)</p> <p>A_input: got ACK (ack=26)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got NAK (ack=26). drop.</p> <p>B_input: not the expected seq. send NAK (ack=26)</p> <p>B_input: not the expected seq. send NAK (ack=26)</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): cccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=33): gggggggggggggggggggg</p> <p>send_window: send packet (seq=33): gggggggggggggggggggg</p> <p>B_input: not the expected seq. send NAK (ack=26)</p> <p>A_input: got NAK (ack=26). drop.</p> <p>B_input: rcv packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>B_input: send ACK (ack=27)</p> <p>A_input: got NAK (ack=26). drop.</p> <p>B_input: not the expected seq. send NAK (ack=27)</p> <p>A_output: buffered packet (seq=34): hhhhhhhhhhhhhhhhhh</p> <p>send_window: send packet (seq=34): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=27): aaaaaaaaaaaaaaaaaa</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): cccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: timer + 15.000000</p>
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	<p>B_input: not the expected seq. send NAK (ack=27)</p> <p>B_input: not the expected seq. send NAK (ack=27)</p> <p>A_output: buffered packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>A_output: buffered packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>B_input: not the expected seq. send NAK (ack=27)</p> <p>A_output: buffered packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_input: got ACK (ack=27)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_timerinterrupt: resend packet (seq=28): bbbbbbbbbbbbbbbbbbbb</p> <p>A_timerinterrupt: resend packet (seq=29): cccccccccccccccccc</p> <p>A_timerinterrupt: resend packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: recv packet (seq=28): bbbbbbbbbbbbbbbbbbbb</p> <p>B_input: send ACK (ack=28)</p> <p>A_output: buffered packet (seq=38): llllllllllllllllll</p> <p>send_window: send packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>B_input: recv packet (seq=29): cccccccccccccccccc</p> <p>B_input: send ACK (ack=29)</p> <p>A_input: got ACK (ack=28)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=39): mmmmmmmmmmmmmmmmmm</p> <p>send_window: send packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>B_input: recv packet (seq=30): dddddddddddddddddd</p> <p>B_input: send ACK (ack=30)</p> <p>A_input: got ACK (ack=29)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p>
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	<p>A_timerinterrupt: resend packet (seq=30): dddddddddddddddddd</p> <p>A_timerinterrupt: resend packet (seq=31): eeeeeeeeeeeeeeeeeeee</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got ACK (ack=30)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: rcv packet (seq=31): eeeeeeeeeeeeeeeeeeee</p> <p>B_input: send ACK (ack=31)</p> <p>A_input: got ACK (ack=31)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=40): nnnnnnnnnnnnnnnnnnnn</p> <p>send_window: send packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>send_window: send packet (seq=38): llllllllllllllllll</p> <p>send_window: send packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=31)</p> <p>B_input: not the expected seq. send NAK (ack=31)</p> <p>A_input: got NAK (ack=31). drop.</p> <p>A_input: got NAK (ack=31). drop.</p>
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<p>B_input: not the expected seq. send NAK (ack=31)</p> <p>A_output: buffered packet (seq=41): ooooooooooooooooooooo</p> <p>B_input: not the expected seq. send NAK (ack=31)</p> <p>B_input: recv packet (seq=32): ffffffffffffffffffff</p> <p>B_input: send ACK (ack=32)</p> <p>A_timerinterrupt: resend packet (seq=32): ffffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=31). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got ACK (ack=32)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=42): ppppppppppppppppppp</p> <p>send_window: send packet (seq=40): nnnnnnnnnnnnnnnnnnn</p> <p>A_input: got NAK (ack=32). drop.</p> <p>A_input: got NAK (ack=32). drop.</p> <p>A_timerinterrupt: resend packet (seq=33): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p>

	<p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_output: buffered packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_input: got NAK (ack=32). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_timerinterrupt: resend packet (seq=33): ggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got NAK (ack=32). drop.</p> <p>A_output: buffered packet (seq=44): rrrrrrrrrrrrrrrrr</p> <p>A_output: buffered packet (seq=45): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=33): ggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got NAK (ack=32). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_output: buffered packet (seq=46): tttttttttttttttt</p> <p>A_input: got NAK (ack=32). drop.</p>
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<p>A_input: got NAK (ack=32). drop.</p> <p>A_timerinterrupt: resend packet (seq=33): ggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got NAK (ack=32). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_output: buffered packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=33): ggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=32). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got NAK (ack=32). drop.</p> <p>B_input: not the expected seq. send NAK (ack=32)</p> <p>A_input: got NAK (ack=32). drop.</p> <p>A_timerinterrupt: resend packet (seq=33): ggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiii</p>
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	<p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: recv packet (seq=33): gggggggggggggggggggg</p> <p>B_input: send ACK (ack=33)</p> <p>A_output: buffered packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_input: got ACK (ack=33)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=33)</p> <p>A_output: buffered packet (seq=49): wwwwwwwwwwwwwwwwwwww</p> <p>send_window: send packet (seq=41): ooooooooooooooooooooo</p> <p>B_input: not the expected seq. send NAK (ack=33)</p> <p>A_input: got NAK (ack=33). drop.</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=33). drop.</p> <p>B_input: not the expected seq. send NAK (ack=33)</p> <p>A_output: buffered packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>B_input: recv packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>B_input: send ACK (ack=34)</p> <p>A_timerinterrupt: resend packet (seq=34): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p>
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	<p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: resend packet (seq=41): oooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>A_input: got ACK (ack=34)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: resend packet (seq=41): oooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=34). drop.</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>A_input: got NAK (ack=34). drop.</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>A_input: got NAK (ack=34). drop.</p> <p>B_input: not the expected seq. send NAK (ack=34)</p> <p>A_timerinterrupt: resend packet (seq=35): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=36): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkk</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=38): llllllllllllllllll</p>
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	<p>B_input: send ACK (ack=38)</p> <p>B_input: recv packet (seq=39): mmmmmmmmmmmmmmmmmmmmm</p> <p>B_input: send ACK (ack=39)</p> <p>A_timerinterrupt: resend packet (seq=37): kkkkkkkkkkkkkkkkkkk</p> <p>A_timerinterrupt: resend packet (seq=38): llllllllllllllllll</p> <p>A_timerinterrupt: resend packet (seq=39): mmmmmmmmmmmmmmmmmmmmm</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got ACK (ack=37)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got ACK (ack=38)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=40): nnnnnnnnnnnnnnnnnnn</p> <p>B_input: send ACK (ack=40)</p> <p>A_input: got ACK (ack=39)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_timerinterrupt: resend packet (seq=40): nnnnnnnnnnnnnnnnnnn</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got ACK (ack=40)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>A_input: got NAK (ack=40). drop.</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p>
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	<p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: not the expected seq. send NAK (ack=40)</p> <p>A_input: got NAK (ack=40). drop.</p> <p>B_input: recv packet (seq=41): ooooooooooooooooooooo</p> <p>B_input: send ACK (ack=41)</p>
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	<p>A_input: got NAK (ack=40). drop.</p> <p>A_timerinterrupt: resend packet (seq=41): ooooooooooooooooooooo</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got ACK (ack=41)</p> <p>A_input: stop timer</p> <p>send_window: send packet (seq=42): pppppppppppppppppppp</p> <p>send_window: send packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>send_window: send packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>send_window: send packet (seq=45): sssssssssssssssssss</p> <p>send_window: send packet (seq=46): ttttttttttttttttt</p> <p>send_window: send packet (seq=47): uuuuuuuuuuuuuuuuuuu</p> <p>send_window: send packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>send_window: send packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): ttttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p>
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	A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq
	A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr
	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt
	A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu
	A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv
	A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww
	A_timerinterrupt: timer + 15.000000
	B_input: not the expected seq. send NAK (ack=41)
	A_input: got NAK (ack=41). drop.
	B_input: not the expected seq. send NAK (ack=41)
	B_input: not the expected seq. send NAK (ack=41)
	B_input: not the expected seq. send NAK (ack=41)
	A_timerinterrupt: resend packet (seq=42): pppppppppppppppppp
	A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq
	A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr
	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt
	A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu
	A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv
	A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww
	A_timerinterrupt: timer + 15.000000
	A_input: got NAK (ack=41). drop.
	B_input: not the expected seq. send NAK (ack=41)
	B_input: not the expected seq. send NAK (ack=41)
	A_input: got NAK (ack=41). drop.
	A_input: got NAK (ack=41). drop.
	B_input: not the expected seq. send NAK (ack=41)
	A_timerinterrupt: resend packet (seq=42): pppppppppppppppppp
	A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq
	A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr
	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt

	<p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p>
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	A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq
	A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr
	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt
	A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu
	A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv
	A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww
	A_timerinterrupt: timer + 15.000000
	A_input: got NAK (ack=41). drop.
	B_input: not the expected seq. send NAK (ack=41)
	B_input: not the expected seq. send NAK (ack=41)
	A_timerinterrupt: resend packet (seq=42): pppppppppppppppppp
	A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq
	A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr
	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt
	A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu
	A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv
	A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww
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	A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss
	A_timerinterrupt: resend packet (seq=46): tttttttttttttttt
	A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu
	A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv
	A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww
	A_timerinterrupt: timer + 15.000000

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	<p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p>
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	<p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p>
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	<p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p>
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	<p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): ttttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): pppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): ttttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p>
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<p>A_input: got NAK (ack=41). drop.</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>B_input: not the expected seq. send NAK (ack=41)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=41). drop.</p> <p>B_input: recv packet (seq=42): ppppppppppppppppppp</p> <p>B_input: send ACK (ack=42)</p> <p>A_timerinterrupt: resend packet (seq=42): ppppppppppppppppppp</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=42)</p> <p>A_input: got ACK (ack=42)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=42)</p> <p>B_input: not the expected seq. send NAK (ack=42)</p> <p>A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq</p> <p>A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr</p> <p>A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss</p>

<p> A_timerinterrupt: resend packet (seq=46): tttttttttttttttt A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww A_timerinterrupt: timer + 15.000000 B_input: not the expected seq. send NAK (ack=42) A_input: got NAK (ack=42). drop. A_input: got NAK (ack=42). drop. B_input: recv packet (seq=43): qqqqqqqqqqqqqqqqqq B_input: send ACK (ack=43) B_input: recv packet (seq=44): rrrrrrrrrrrrrrrrrr B_input: send ACK (ack=44) A_timerinterrupt: resend packet (seq=43): qqqqqqqqqqqqqqqqqq A_timerinterrupt: resend packet (seq=44): rrrrrrrrrrrrrrrrrr A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss A_timerinterrupt: resend packet (seq=46): tttttttttttttttt A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww A_timerinterrupt: timer + 15.000000 B_input: not the expected seq. send NAK (ack=44) A_input: got ACK (ack=43) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 A_input: got ACK (ack=44) Warning: attempt to start a timer that is already started A_input: timer + 15.000000 B_input: not the expected seq. send NAK (ack=44) A_timerinterrupt: resend packet (seq=45): ssssssssssssssssss A_timerinterrupt: resend packet (seq=46): tttttttttttttttt A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuu A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww </p>
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	<p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=44)</p> <p>A_input: got NAK (ack=44). drop.</p> <p>B_input: not the expected seq. send NAK (ack=44)</p> <p>B_input: not the expected seq. send NAK (ack=44)</p> <p>A_timerinterrupt: resend packet (seq=45): sssssssssssssssss</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=44). drop.</p> <p>B_input: recv packet (seq=45): sssssssssssssssss</p> <p>B_input: send ACK (ack=45)</p> <p>A_input: got NAK (ack=44). drop.</p> <p>A_input: got ACK (ack=45)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: recv packet (seq=46): tttttttttttttttt</p> <p>B_input: send ACK (ack=46)</p> <p>B_input: recv packet (seq=47): uuuuuuuuuuuuuuuuuuu</p> <p>B_input: send ACK (ack=47)</p> <p>A_timerinterrupt: resend packet (seq=46): tttttttttttttttt</p> <p>A_timerinterrupt: resend packet (seq=47): uuuuuuuuuuuuuuuuuuu</p> <p>A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwwww</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: recv packet (seq=48): vvvvvvvvvvvvvvvvvv</p> <p>B_input: send ACK (ack=48)</p> <p>A_input: got ACK (ack=46)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_input: got ACK (ack=47)</p>
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Warning: attempt to start a timer that is already started

A_input: timer + 15.000000

B_input: recv packet (seq=49): wwwwwwwwwwwwwwwwww

B_input: send ACK (ack=49)

A_timerinterrupt: resend packet (seq=48): vvvvvvvvvvvvvvvvv

A_timerinterrupt: resend packet (seq=49): wwwwwwwwwwwwwwwwww

A_timerinterrupt: timer + 15.000000

B_input: not the expected seq. send NAK (ack=49)

A_input: got ACK (ack=48)

Warning: attempt to start a timer that is already started

A_input: timer + 15.000000

B_input: not the expected seq. send NAK (ack=49)

A_input: got ACK (ack=49)

A_input: stop timer

send_window: send packet (seq=50): xxxxxxxxxxxxxxxxxxxx

B_input: not the expected seq. send NAK (ack=49)

B_input: not the expected seq. send NAK (ack=49)

A_input: got NAK (ack=49). drop.

B_input: not the expected seq. send NAK (ack=49)

A_input: got NAK (ack=49). drop.

A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx

A_timerinterrupt: timer + 15.000000

A_input: got NAK (ack=49). drop.

B_input: not the expected seq. send NAK (ack=49)

B_input: not the expected seq. send NAK (ack=49)

A_input: got NAK (ack=49). drop.

A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx

A_timerinterrupt: timer + 15.000000

B_input: not the expected seq. send NAK (ack=49)

B_input: not the expected seq. send NAK (ack=49)

A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx

A_timerinterrupt: timer + 15.000000

B_input: not the expected seq. send NAK (ack=49)

	<p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p>
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	<p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p>
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	<p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p>
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	<p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p>
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<p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p>

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	<p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p>
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	<p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p>
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	<p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>B_input: not the expected seq. send NAK (ack=49)</p> <p>A_input: got NAK (ack=49). drop.</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=49). drop.</p> <p>B_input: recv packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>B_input: send ACK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_timerinterrupt: resend packet (seq=50): xxxxxxxxxxxxxxxxxxxx</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got ACK (ack=50)</p> <p>A_input: stop timer</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p>
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	<p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p>
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	<p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>B_input: not the expected seq. send NAK (ack=50)</p> <p>A_input: got NAK (ack=50). drop.</p> <p>A_input: got NAK (ack=50). drop.</p> <p>Simulator terminated at time 2516.320313</p> <p>after sending 50 msgs from layer5</p>
C)	<p>No loss and 30 percent corruption scenario to demonstrate your code can recover the erroneously received packets</p>
	<p>λ ./a.exe 10 0 0.3 10 0</p> <p>----- Stop and Wait Network Simulator Version 1.1 -----</p> <p>the number of messages to simulate: 10</p> <p>packet loss probability: 0.000000</p> <p>packet corruption probability: 0.300000</p> <p>average time between messages from sender's layer5: 10.000000</p> <p>TRACE: 0</p> <p>A_output: buffered packet (seq=1): aaaaaaaaaaaaaaaaaa</p> <p>send_window: send packet (seq=1): aaaaaaaaaaaaaaaaaa</p> <p>B_input: rcv packet (seq=1): aaaaaaaaaaaaaaaaaa</p> <p>B_input: send ACK (ack=1)</p> <p>A_input: got ACK (ack=1)</p> <p>A_input: stop timer</p>

<p> A_output: buffered packet (seq=2): bbbbbbbbbbbbbbbbbbb send_window: send packet (seq=2): bbbbbbbbbbbbbbbbbbb B_input: recv packet (seq=2): bbbbbbbbbbbbbbbbbbb B_input: send ACK (ack=2) A_input: got ACK (ack=2) A_input: stop timer A_output: buffered packet (seq=3): ccccccccccccccccc send_window: send packet (seq=3): ccccccccccccccccc B_input: recv packet (seq=3): ccccccccccccccccc B_input: send ACK (ack=3) A_input: got ACK (ack=3) A_input: stop timer A_output: buffered packet (seq=4): ddddddddddddddddd send_window: send packet (seq=4): ddddddddddddddddd B_input: packet corrupted. send NAK (ack=3) A_input: got NAK (ack=3). drop. A_timerinterrupt: resend packet (seq=4): ddddddddddddddddd A_timerinterrupt: timer + 15.000000 A_output: buffered packet (seq=5): eeeeeeeeeeeeeeeee send_window: send packet (seq=5): eeeeeeeeeeeeeeeee A_output: buffered packet (seq=6): fffffffffffffffff send_window: send packet (seq=6): fffffffffffffffff B_input: recv packet (seq=4): ddddddddddddddddd B_input: send ACK (ack=4) A_input: packet corrupted. drop. A_output: buffered packet (seq=7): ggggggggggggggggggg send_window: send packet (seq=7): ggggggggggggggggggg B_input: recv packet (seq=5): eeeeeeeeeeeeeeeee B_input: send ACK (ack=5) A_timerinterrupt: resend packet (seq=4): ddddddddddddddddd A_timerinterrupt: resend packet (seq=5): eeeeeeeeeeeeeeeee A_timerinterrupt: resend packet (seq=6): fffffffffffffffff A_timerinterrupt: resend packet (seq=7): ggggggggggggggggggg </p>
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	<p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: packet corrupted. send NAK (ack=5)</p> <p>A_input: got ACK (ack=5)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=5)</p> <p>A_input: got NAK (ack=5). drop.</p> <p>B_input: not the expected seq. send NAK (ack=5)</p> <p>A_output: buffered packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>send_window: send packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=6): ffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=7): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_output: buffered packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>send_window: send packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>B_input: not the expected seq. send NAK (ack=5)</p> <p>A_input: got NAK (ack=5). drop.</p> <p>B_input: recv packet (seq=6): ffffffffffffffffff</p> <p>B_input: send ACK (ack=6)</p> <p>A_input: got NAK (ack=5). drop.</p> <p>B_input: recv packet (seq=7): gggggggggggggggggggg</p> <p>B_input: send ACK (ack=7)</p> <p>A_timerinterrupt: resend packet (seq=6): ffffffffffffffffff</p> <p>A_timerinterrupt: resend packet (seq=7): gggggggggggggggggggg</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=5). drop.</p> <p>A_input: got ACK (ack=6)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_output: buffered packet (seq=10): jjjjjjjjjjjjjjjjjjjj</p>
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<p>send_window: send packet (seq=10): jjjjjjjjjjjjjjjjjj</p> <p>B_input: packet corrupted. send NAK (ack=7)</p> <p>B_input: not the expected seq. send NAK (ack=7)</p> <p>A_input: got ACK (ack=7)</p> <p>Warning: attempt to start a timer that is already started</p> <p>A_input: timer + 15.000000</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>B_input: not the expected seq. send NAK (ack=7)</p> <p>B_input: packet corrupted. send NAK (ack=7)</p> <p>A_input: packet corrupted. drop.</p> <p>A_input: got NAK (ack=7). drop.</p> <p>B_input: packet corrupted. send NAK (ack=7)</p> <p>B_input: packet corrupted. send NAK (ack=7)</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: got NAK (ack=7). drop.</p> <p>B_input: not the expected seq. send NAK (ack=7)</p> <p>A_input: packet corrupted. drop.</p> <p>B_input: packet corrupted. send NAK (ack=7)</p> <p>A_input: got NAK (ack=7). drop.</p> <p>A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhh</p> <p>A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiiii</p> <p>A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj</p> <p>A_timerinterrupt: timer + 15.000000</p> <p>A_input: packet corrupted. drop.</p> <p>A_input: got NAK (ack=7). drop.</p> <p>B_input: not the expected seq. send NAK (ack=7)</p> <p>B_input: packet corrupted. send NAK (ack=7)</p>

B_input: recv packet (seq=8): hhhhhhhhhhhhhhhhhhh
 B_input: send ACK (ack=8)
 A_input: packet corrupted. drop.
 B_input: recv packet (seq=9): iiiiiiiiiiiiiiiii
 B_input: send ACK (ack=9)
 B_input: recv packet (seq=10): jjjjjjjjjjjjjjjjjj
 B_input: send ACK (ack=10)
 A_input: got NAK (ack=7). drop.
 A_timerinterrupt: resend packet (seq=8): hhhhhhhhhhhhhhhhhhh
 A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii
 A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj
 A_timerinterrupt: timer + 15.000000
 A_input: got NAK (ack=7). drop.
 A_input: got ACK (ack=8)
 Warning: attempt to start a timer that is already started
 A_input: timer + 15.000000
 B_input: not the expected seq. send NAK (ack=10)
 A_input: packet corrupted. drop.
 B_input: not the expected seq. send NAK (ack=10)
 A_timerinterrupt: resend packet (seq=9): iiiiiiiiiiiiiiiii
 A_timerinterrupt: resend packet (seq=10): jjjjjjjjjjjjjjjjjj
 A_timerinterrupt: timer + 15.000000
 B_input: not the expected seq. send NAK (ack=10)
 A_input: got ACK (ack=10)
 A_input: stop timer
 A_input: got NAK (ack=10). drop.
 B_input: packet corrupted. send NAK (ack=10)
 A_input: got NAK (ack=10). drop.
 B_input: not the expected seq. send NAK (ack=10)
 B_input: packet corrupted. send NAK (ack=10)
 A_input: got NAK (ack=10). drop.
 B_input: not the expected seq. send NAK (ack=10)
 A_input: packet corrupted. drop.

	<p>B_input: not the expected seq. send NAK (ack=10)</p> <p>A_input: got NAK (ack=10). drop.</p> <p>B_input: not the expected seq. send NAK (ack=10)</p> <p>B_input: packet corrupted. send NAK (ack=10)</p> <p>B_input: packet corrupted. send NAK (ack=10)</p> <p>A_input: packet corrupted. drop.</p> <p>A_input: packet corrupted. drop.</p> <p>A_input: packet corrupted. drop.</p> <p>A_input: got NAK (ack=10). drop.</p> <p>A_input: got NAK (ack=10). drop.</p> <p>A_input: got NAK (ack=10). drop.</p> <p>Simulator terminated at time 227.009552</p> <p>after sending 10 msgs from layer5</p>
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