

NOTE: 100 messages was used for the PDF for the ability to print out all the trace data but 1000 still works

----- Network Simulator Version 2.3 -----

Enter the number of messages to simulate: 100  
Packet loss probability [enter number between 0.0 and 1.0]: 0.1  
Packet corruption probability [0.0 for no corruption]: 0.1  
Packet out-of-order probability [0.0 for no out-of-order]: 0.1  
Average time between messages from sender's layer5 [ > 0.0]: 1000  
Enter Level of tracing desired: 1  
Do you want actions randomized: (1 = yes, 0 = no)? 1  
Do you want Bidirectional: (1 = yes, 0 = no)? 0  
Input parameters:  
Number of Messages = 100 Lost Packet Prob. = 0.100  
Corrupt Packet Prob. = 0.100 Out Of Order Prob. = 0.100  
Ave. time between messages = 1000.00 Trace level = 1  
Randomize = 1 Bi-directional = 0

A: 749.1555, Layer 5 to 4 Message = !fEVhy->Pbs'2J3m~2DU  
A window is not full, sending a message  
Setting Checksum = -14941  
B recieved a packet!  
Setting Checksum = -14941  
Getting Checksum = -14941  
Received packet 0 expecting 0  
Setting Checksum = -2  
We are sending the packet up  
B: 757.5257, Layer 4 to 5 Message = !fEVhy->Pbs'2J3m~2DU  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -14941  
Getting Checksum = -14941  
Received packet 0 expecting 1  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -2  
Getting Checksum = -2  
A received an ACK  
Getting unACKed packets  
unACKed packet: 0  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 1805.9155, Layer 5 to 4 Message = ##i.Qt9]!Eh-Ps8[~Dg,  
A window is not full, sending a message  
Setting Checksum = -15168  
B recieved a packet!

Setting Checksum = -15168  
Getting Checksum = -15168  
Received packet 1 expecting 1  
Setting Checksum = -3  
We are sending the packet up  
B: 1836.4941, Layer 4 to 5 Message = ##i.Qt9]!Eh-Ps8[~Dg,  
A has received a packet.  
Setting Checksum = -3  
Getting Checksum = -3  
A received an ACK  
Getting unACKed packets  
unACKed packet: 1  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 2565.4723, Layer 5 to 4 Message = \$X\$d:oFzQ(j3h>sJ~U,a  
A window is not full, sending a message  
Setting Checksum = -15893  
B recieved a packet!  
Setting Checksum = -15893  
Getting Checksum = -15893  
Received packet 2 expecting 2  
Setting Checksum = -4  
We are sending the packet up  
B: 2574.2445, Layer 4 to 5 Message = \$X\$d:oFzQ(j3h>sJ~U,a  
A has received a packet.  
Setting Checksum = -4  
Getting Checksum = -4  
A received an ACK  
Getting unACKed packets  
unACKed packet: 2  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 3543.1269, Layer 5 to 4 Message = %kS%\$jR:#iQ9!hP8~gO7  
A window is not full, sending a message  
Setting Checksum = -14564  
B recieved a packet!  
Setting Checksum = -14564  
Getting Checksum = -14564  
Received packet 3 expecting 3  
Setting Checksum = -5  
We are sending the packet up  
B: 3558.7570, Layer 4 to 5 Message = %kS%\$jR:#iQ9!hP8~gO7  
A has received a packet.  
Setting Checksum = -5  
Getting Checksum = -5  
A received an ACK  
Getting unACKed packets  
unACKed packet: 3  
Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window  
 A: 5036.7088, Layer 5 to 4 Message = &}wq&e\_XRLF?93-'\~xrl  
 A window is not full, sending a message  
 Setting Checksum = -16005  
 B recieved a packet!  
 Setting Checksum = -16005  
 Getting Checksum = -16005  
 Received packet 4 expecting 4  
 Setting Checksum = -6  
 We are sending the packet up  
 B: 5050.8941, Layer 4 to 5 Message = &}wq&e\_XRLF?93-'\~xrl  
 A has received a pcket.  
 Setting Checksum = -6  
 Getting Checksum = -6  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 4  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 5108.7676, Layer 5 to 4 Message = '2=IT'kv\$x:FQ]hs~,7C  
 A window is not full, sending a message  
 Setting Checksum = -15503  
 B recieved a packet!  
 Setting Checksum = -15503  
 Getting Checksum = -15503  
 Received packet 5 expecting 5  
 Setting Checksum = -7  
 We are sending the packet up  
 B: 5113.5593, Layer 4 to 5 Message = '2=IT'kv\$x:FQ]hs~,7C  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15503  
 Getting Checksum = -15503  
 Received packet 5 expecting 6  
 Resening ACK!  
 A has received a pcket.  
 Setting Checksum = -7  
 Getting Checksum = -7  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 5  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 5890.0438, Layer 5 to 4 Message = (Eb~'=Z(6SpxLi(Eb~'=Zw  
 A window is not full, sending a message  
 Setting Checksum = -16820  
 B recieved a packet!

Setting Checksum = -15548  
 Getting Checksum = -9847220  
 Detected Corruption...  
 Resending last ACK  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16820  
 Getting Checksum = -16820  
 Received packet 6 expecting 6  
 Setting Checksum = -8  
 We are sending the packet up  
 B: 6004.7485, Layer 4 to 5 Message = (Eb~=Z(6SpxLi(Eb~=Zw  
 A has received a pcket.  
 Setting Checksum = -8  
 Getting Checksum = -8  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 6  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 6123.6071, Layer 5 to 4 Message = dW(V'U&)%S\$R2Q!P~O}N  
 A window is not full, sending a message  
 Setting Checksum = -14240  
 B recieved a packet!  
 Setting Checksum = -14240  
 Getting Checksum = -14240  
 Received packet 7 expecting 7  
 Setting Checksum = -9  
 We are sending the packet up  
 B: 6129.6440, Layer 4 to 5 Message = dW(V'U&)%S\$R2Q!P~O}N  
 A has received a pcket.  
 Setting Checksum = -9  
 Getting Checksum = -9  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 7  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 6603.1353, Layer 5 to 4 Message = \*jL.nP2r\*6vX:z]>~aC%  
 A window is not full, sending a message  
 Setting Checksum = -15401  
 B recieved a packet!  
 Setting Checksum = -15401  
 Getting Checksum = -15401

Received packet 8 expecting 8  
Setting Checksum = -10  
We are sending the packet up  
B: 6631.3388, Layer 4 to 5 Message = \*jL.nP2r\*6vX:z]>~aC%  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15401  
Getting Checksum = -15401  
Received packet 8 expecting 9  
Resending ACK!  
A has received a pcket.  
Setting Checksum = -10  
Getting Checksum = -10  
A received an ACK  
Getting unACKed packets  
unACKed packet: 8  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 7134.8744, Layer 5 to 4 Message = +fpdWK>2&+k\_RF3~rfY  
A window is not full, sending a message  
Setting Checksum = -15651  
B recieved a packet!  
Setting Checksum = -15651  
Getting Checksum = -15651  
Received packet 9 expecting 9  
Setting Checksum = -11  
We are sending the packet up  
B: 7139.8099, Layer 4 to 5 Message = +fpdWK>2&+k\_RF3~rfY  
A has received a pcket.  
Setting Checksum = -11  
Getting Checksum = -11  
A received an ACK  
Getting unACKed packets  
unACKed packet: 9  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 8362.2072, Layer 5 to 4 Message = ,16;AFKPUZ,ejoty~&+0  
A window is not full, sending a message  
Setting Checksum = -15508  
B recieved a packet!  
Setting Checksum = -15508  
Getting Checksum = -15508  
Received packet 10 expecting 10  
Setting Checksum = -12  
We are sending the packet up  
B: 8388.1282, Layer 4 to 5 Message = ,16;AFKPUZ,ejoty~&+0  
A has received a pcket.

Setting Checksum = -12  
Getting Checksum = -12  
A received an ACK  
Getting unACKed packets  
unACKed packet: 10  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 9606.0063, Layer 5 to 4 Message = -DZq\*AWn'=T-\$:Qh~7Ne  
A window is not full, sending a message  
Setting Checksum = -14734  
B recieved a packet!  
Setting Checksum = -14734  
Getting Checksum = -14734  
Received packet 11 expecting 11  
Setting Checksum = -13  
We are sending the packet up  
B: 9627.1601, Layer 4 to 5 Message = -DZq\*AWn'=T-\$:Qh~7Ne  
A has received a pcket.  
Setting Checksum = -13  
Getting Checksum = -13  
A received an ACK  
Getting unACKed packets  
unACKed packet: 11  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 11283.9291, Layer 5 to 4 Message = .V~Iq;d.V~Iq.d.V~Iq;  
A window is not full, sending a message  
Setting Checksum = -16232  
B recieved a packet!  
Setting Checksum = -16232  
Getting Checksum = -16232  
Received packet 12 expecting 12  
Setting Checksum = -14  
We are sending the packet up  
B: 11290.9462, Layer 4 to 5 Message = .V~Iq;d.V~Iq.d.V~Iq;  
A has received a pcket.  
Setting Checksum = -14  
Getting Checksum = -14  
A received an ACK  
Getting unACKed packets  
unACKed packet: 12  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 12663.0317, Layer 5 to 4 Message = xiE~Z6pL(b=wSxiE~Z6p  
A window is not full, sending a message  
Setting Checksum = -17297  
B recieved a packet!  
Setting Checksum = -17297  
Getting Checksum = -17297

Received packet 13 expecting 13  
Setting Checksum = -15  
We are sending the packet up  
B: 12688.5226, Layer 4 to 5 Message = xiE~Z6pL(b=wSxiE~Z6p  
A has received a pcket.  
Setting Checksum = 255  
Getting Checksum = -256  
A received a corrupt packet  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -17297  
Getting Checksum = -17297  
Received packet 13 expecting 14  
Resening ACK!  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -17297  
Getting Checksum = -17297  
Received packet 13 expecting 14  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -15  
Getting Checksum = -15  
A received an ACK  
Getting unACKed packets  
unACKed packet: 13  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 14199.5803, Layer 5 to 4 Message = d{iVD1|jWE2}2X03~lYG  
A window is not full, sending a message  
Setting Checksum = -15785  
B recieved a packet!  
Setting Checksum = -15785  
Getting Checksum = -15785  
Received packet 14 expecting 14  
Setting Checksum = -16  
We are sending the packet up  
B: 14225.9669, Layer 4 to 5 Message = d{iVD1|jWE2}2X03~lYG  
A has received a pcket.  
Setting Checksum = -16  
Getting Checksum = -16  
A received an ACK  
Getting unACKed packets  
unACKed packet: 14  
Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 15875.4213, Layer 5 to 4 Message = 10x.-,+\*)(' & % \$ # 1 ~ } | {

A window is not full, sending a message

Setting Checksum = -13737

A Timer Interrupt

We have unacked packets, lets resend them

A is sending unacked packet to B

B recieved a packet!

Setting Checksum = -13737

Getting Checksum = -13737

Received packet 15 expecting 15

Setting Checksum = -17

We are sending the packet up

B: 15931.6736, Layer 4 to 5 Message = 10x.-,+\*)(' & % \$ # 1 ~ } | {

A has received a pcket.

Setting Checksum = -17

Getting Checksum = -17

A received an ACK

Getting unACKed packets

unACKed packet: 15

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 17827.8305, Layer 5 to 4 Message = 2CSdt'7HXiy,<M^ n 21BR

A window is not full, sending a message

Setting Checksum = -14452

B recieved a packet!

Setting Checksum = -14452

Getting Checksum = -7550977

Detected Corruption...

Resending last ACK

A has received a pcket.

Setting Checksum = -13

Getting Checksum = 16777199

A received a corrupt packet

A Timer Interrupt

We have unacked packets, lets resend them

A is sending unacked packet to B

B recieved a packet!

Setting Checksum = -14452

Getting Checksum = -14452

Received packet 16 expecting 16

Setting Checksum = -18

We are sending the packet up

B: 17880.0630, Layer 4 to 5 Message = 2CSdt'7HXiy,<M^ n 21BR

A has received a pcket.

Setting Checksum = -18

Getting Checksum = -18

A received an ACK

Getting unACKed packets



unACKed packet: 16  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 18344.8288, Layer 5 to 4 Message = 3Uw;^!Df\*Ln2Tv:]~3e)  
A window is not full, sending a message  
Setting Checksum = -15080  
B recieved a packet!  
Setting Checksum = -15080  
Getting Checksum = -15080  
Received packet 17 expecting 17  
Setting Checksum = -19  
We are sending the packet up  
B: 18360.0943, Layer 4 to 5 Message = 3Uw;^!Df\*Ln2Tv:]~3e)  
A has received a pcket.  
Setting Checksum = -19  
Getting Checksum = -19  
A received an ACK  
Getting unACKed packets  
unACKed packet: 17  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 19088.9701, Layer 5 to 4 Message = 4f=qGzP&Yxc8lB3K~T4^  
A window is not full, sending a message  
Setting Checksum = -15779  
B recieved a packet!  
Setting Checksum = -15779  
Getting Checksum = -15779  
Received packet 18 expecting 18  
Setting Checksum = -20  
We are sending the packet up  
B: 19094.5738, Layer 4 to 5 Message = 4f=qGzP&Yxc8lB3K~T4^  
A has received a pcket.  
Setting Checksum = -20  
Getting Checksum = -20  
A received an ACK  
Getting unACKed packets  
unACKed packet: 18  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 20981.7325, Layer 5 to 4 Message = 5zbI0u]D+pW>&kR9~fM5  
A window is not full, sending a message  
Setting Checksum = -15265  
B recieved a packet!  
Setting Checksum = -15265  
Getting Checksum = -15265  
Received packet 19 expecting 19  
Setting Checksum = -21  
We are sending the packet up  
B: 20985.7586, Layer 4 to 5 Message = 5zbI0u]D+pW>&kR9~fM5

A has received a packet.  
Setting Checksum = -21  
Getting Checksum = -21  
A received an ACK  
Getting unACKed packets  
unACKed packet: 19  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 22314.8539, Layer 5 to 4 Message = 6x(~wpibZSLE=6x(~wpi  
A window is not full, sending a message  
Setting Checksum = -17701  
B recieved a packet!  
Setting Checksum = -17701  
Getting Checksum = -17701  
Received packet 20 expecting 20  
Setting Checksum = -22  
We are sending the packet up  
B: 22333.9249, Layer 4 to 5 Message = 6x(~wpibZSLE=6x(~wpi  
A has received a packet.  
Setting Checksum = -22  
Getting Checksum = -22  
A received an ACK  
Getting unACKed packets  
unACKed packet: 20  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 24083.9211, Layer 5 to 4 Message = d7LVaku!,6AK2`jt~+5?  
A window is not full, sending a message  
Setting Checksum = -14626  
B recieved a packet!  
Setting Checksum = -14626  
Getting Checksum = -14626  
Received packet 21 expecting 21  
Setting Checksum = -23  
We are sending the packet up  
B: 24098.9284, Layer 4 to 5 Message = d7LVaku!,6AK2`jt~+5?  
A has received a packet.  
Setting Checksum = -23  
Getting Checksum = -23  
A received an ACK  
Getting unACKed packets  
unACKed packet: 21  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 24622.9611, Layer 5 to 4 Message = 8T8.Jf\$?[w5Qm+Gc~<Xt  
A window is not full, sending a message  
Setting Checksum = -16210  
B recieved a packet!  
Setting Checksum = -16210

Getting Checksum = -16210  
Received packet 22 expecting 22  
Setting Checksum = -24  
We are sending the packet up  
B: 24632.2369, Layer 4 to 5 Message = 8T8.Jf\$?[w5Qm+Gc~<Xt  
A has received a packet.  
Setting Checksum = -24  
Getting Checksum = -24  
A received an ACK  
Getting unACKed packets  
unACKed packet: 22  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 25276.6665, Layer 5 to 4 Message = 9g693a0^-Z\*W"TSQ~N{K  
A window is not full, sending a message  
Setting Checksum = -14848  
B recieved a packet!  
Setting Checksum = -14848  
Getting Checksum = -14848  
Received packet 23 expecting 23  
Setting Checksum = -25  
We are sending the packet up  
B: 25294.5258, Layer 4 to 5 Message = 9g693a0^-Z\*W"TSQ~N{K  
A has received a packet.  
Setting Checksum = -25  
Getting Checksum = -25  
A received an ACK  
Getting unACKed packets  
unACKed packet: 23  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 26329.9537, Layer 5 to 4 Message = :yZ;:[<{]=|^>}\_?~`A!  
A window is not full, sending a message  
Setting Checksum = -16067  
B recieved a packet!  
Setting Checksum = -16067  
Getting Checksum = -16067  
Received packet 24 expecting 24  
Setting Checksum = -26  
We are sending the packet up  
B: 26330.9608, Layer 4 to 5 Message = :yZ;:[<{]=|^>}\_?~`A!  
A has received a packet.  
Setting Checksum = -26  
Getting Checksum = -26  
A received an ACK  
Getting unACKed packets  
unACKed packet: 24  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window

A: 26660.3266, Layer 5 to 4 Message = ;.~qd;I;.~qdVI;.~qdV  
 A window is not full, sending a message  
 Setting Checksum = -16809  
 B recieved a packet!  
 Setting Checksum = -16809  
 Getting Checksum = -16809  
 Received packet 25 expecting 25  
 Setting Checksum = -27  
 We are sending the packet up  
 B: 26664.5080, Layer 4 to 5 Message = ;.~qd;I;.~qdVI;.~qdV  
 A has received a pcket.  
 Setting Checksum = -27  
 Getting Checksum = -27  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 25  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 27690.3052, Layer 5 to 4 Message = <AEIMQ<Y^bfjnr vz~%)-  
 A window is not full, sending a message  
 Setting Checksum = -16487  
 B recieved a packet!  
 Setting Checksum = -16487  
 Getting Checksum = -16487  
 Received packet 26 expecting 26  
 Setting Checksum = -28  
 We are sending the packet up  
 B: 27720.3065, Layer 4 to 5 Message = <AEIMQ<Y^bfjnr vz~%)-  
 A has received a pcket.  
 Setting Checksum = -28  
 Getting Checksum = -28  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 26  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 28694.4605, Layer 5 to 4 Message = =fi~6Lb=xEZp(=3i~6Lb  
 A window is not full, sending a message  
 Setting Checksum = -15768  
 B recieved a packet!  
 Setting Checksum = -15768  
 Getting Checksum = -15768  
 Received packet 27 expecting 27  
 Setting Checksum = -29  
 We are sending the packet up  
 B: 28711.6418, Layer 4 to 5 Message = =fi~6Lb=xEZp(=3i~6Lb  
 A has received a pcket.  
 Setting Checksum = -29  
 Getting Checksum = -29

A received an ACK  
Getting unACKed packets  
unACKed packet: 27  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 29583.3059, Layer 5 to 4 Message = dfxV}Gn7>(Ov2g0W~Ho8  
A window is not full, sending a message  
Setting Checksum = -15691  
B recieved a packet!  
Setting Checksum = -15691  
Getting Checksum = -15691  
Received packet 28 expecting 28  
Setting Checksum = -30  
We are sending the packet up  
B: 29593.5549, Layer 4 to 5 Message = dfxV}Gn7>(Ov2g0W~Ho8  
A has received a pcket.  
Setting Checksum = -30  
Getting Checksum = -30  
A received an ACK  
Getting unACKed packets  
unACKed packet: 28  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 30785.9935, Layer 5 to 4 Message = ?xS.gBzU0?D|W2kF~Y4m  
A window is not full, sending a message  
Setting Checksum = -16296  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16296  
Getting Checksum = -16296  
Received packet 29 expecting 29  
Setting Checksum = -31  
We are sending the packet up  
B: 30839.3807, Layer 4 to 5 Message = ?xS.gBzU0?D|W2kF~Y4m  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16296  
Getting Checksum = -16296  
Received packet 29 expecting 30  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -31  
Getting Checksum = -31  
A received an ACK  
Getting unACKed packets

unACKed packet: 29  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 31775.2315, Layer 5 to 4 Message = A-wdP<)s`LA%o[H4~kWD  
 A window is not full, sending a message  
 Setting Checksum = -15790  
 B recieved a packet!  
 Setting Checksum = -24855  
 Getting Checksum = -15790  
 Detected Corruption...  
 Resending last ACK  
 A has received a pcket.  
 Setting Checksum = -31  
 Getting Checksum = -31  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 30  
 Seq number is higher, no packets to ack.  
 Sending any messages in the buffer, that fit in window  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15790  
 Getting Checksum = -15790  
 Received packet 30 expecting 30  
 Setting Checksum = -32  
 We are sending the packet up  
 B: 31831.5046, Layer 4 to 5 Message = A-wdP<)s`LA%o[H4~kWD  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15790  
 Getting Checksum = -15790  
 Received packet 30 expecting 31  
 Resening ACK!  
 A has received a pcket.  
 Setting Checksum = -17  
 Getting Checksum = 16777184  
 A received a corrupt packet  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15790  
 Getting Checksum = -15790  
 Received packet 30 expecting 31  
 Resening ACK!

A has received a packet.  
Setting Checksum = -32  
Getting Checksum = -32  
A received an ACK  
Getting unACKed packets  
unACKed packet: 30  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 33528.0924, Layer 5 to 4 Message = B?=-;97531x-B)'%#~|zx  
A window is not full, sending a message  
Setting Checksum = -14862  
B recieved a packet!  
Setting Checksum = -14862  
Getting Checksum = -14862  
Received packet 31 expecting 31  
Setting Checksum = -33  
We are sending the packet up  
B: 33544.3731, Layer 4 to 5 Message = B?=-;97531x-B)'%#~|zx

Printing the contents of the Simulation Event Q  
Event Time = 33578.092 A: Timer  
Event Time = 34223.081 A: LAYER 5

A has received a packet.  
Setting Checksum = -33  
Getting Checksum = -33  
A received an ACK  
Getting unACKed packets  
unACKed packet: 31  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window

Printing the contents of the Simulation Event Q

A: 34223.0810, Layer 5 to 4 Message = CRbq#2BQap!1CP`o~0?O  
A window is not full, sending a message  
Setting Checksum = -14976

Printing the contents of the Simulation Event Q  
Event Time = 34273.081 A: Timer  
Event Time = 36217.011 A: LAYER 5

B recieved a packet!  
Setting Checksum = -15054  
Getting Checksum = -14976  
Detected Corruption...  
Resending last ACK

Printing the contents of the Simulation Event Q

Event Time = 34279.912 A: LAYER 3 Seq/Ack/Check = 31/255/33554399:  
Event Time = 36217.011 A: LAYER 5

A Timer Interrupt

We have unacked packets, lets resend them

A is sending unacked packet to B

Printing the contents of the Simulation Event Q

Event Time = 34293.883 B: LAYER 3 Seq/Ack/Check = 32/0/-14976: CRbq#2BQap!1CP`o~0?O

Event Time = 34323.081 A: Timer

Event Time = 36217.011 A: LAYER 5

A has received a packet.

Setting Checksum = -287

Getting Checksum = 33554399

A received a corrupt packet

Printing the contents of the Simulation Event Q

Event Time = 34323.081 A: Timer

Event Time = 36217.011 A: LAYER 5

B recieved a packet!

Setting Checksum = -14976

Getting Checksum = -14976

Received packet 32 expecting 32

Setting Checksum = -34

We are sending the packet up

B: 34293.8826, Layer 4 to 5 Message = CRbq#2BQap!1CP`o~0?O

A has received a packet.

Setting Checksum = -34

Getting Checksum = -34

A received an ACK

Getting unACKed packets

unACKed packet: 32

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 36217.0105, Layer 5 to 4 Message = De(Ij-No2St7XD<^~Bc&

A window is not full, sending a message

Setting Checksum = -15072

B recieved a packet!

Setting Checksum = -15072

Getting Checksum = -15072

Received packet 33 expecting 33

Setting Checksum = -35

We are sending the packet up

B: 36223.1724, Layer 4 to 5 Message = De(Ij-No2St7XD<^~Bc&

A has received a packet.

Setting Checksum = -35

Getting Checksum = -35



A received an ACK  
Getting unACKed packets  
unACKed packet: 33  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 37300.9595, Layer 5 to 4 Message = EwL~S(Zxb6i=pEEL~S(Z  
A window is not full, sending a message  
Setting Checksum = -15791  
B recieved a packet!  
Setting Checksum = -15791  
Getting Checksum = -15791  
Received packet 34 expecting 34  
Setting Checksum = -36  
We are sending the packet up  
B: 37311.7065, Layer 4 to 5 Message = EwL~S(Zxb6i=pEEL~S(Z  
A has received a pcket.  
Setting Checksum = -36  
Getting Checksum = -36  
A received an ACK  
Getting unACKed packets  
unACKed packet: 34  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 38404.6614, Layer 5 to 4 Message = d,pV<#gM3w^D2nTF~eK1  
A window is not full, sending a message  
Setting Checksum = -15571  
B recieved a packet!  
Setting Checksum = -15571  
Getting Checksum = -15571  
Received packet 35 expecting 35  
Setting Checksum = -37  
We are sending the packet up  
B: 38431.1238, Layer 4 to 5 Message = d,pV<#gM3w^D2nTF~eK1  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A has received a pcket.  
Setting Checksum = -37  
Getting Checksum = -37  
A received an ACK  
Getting unACKed packets  
unACKed packet: 35  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
B recieved a packet!  
Setting Checksum = -15571  
Getting Checksum = -15571  
Received packet 35 expecting 36  
Resening ACK!

A has received a packet.  
 Setting Checksum = -37  
 Getting Checksum = -37  
 A: 40324.0133, Layer 5 to 4 Message = Gf6.&{skcZRJB93)Gvnf  
 A window is not full, sending a message  
 Setting Checksum = -15749  
 B recieved a packet!  
 Setting Checksum = -15749  
 Getting Checksum = -15749  
 Received packet 36 expecting 36  
 Setting Checksum = -38  
 We are sending the packet up  
 B: 40331.3118, Layer 4 to 5 Message = Gf6.&{skcZRJB93)Gvnf  
 A has received a packet.  
 Setting Checksum = -38  
 Getting Checksum = -38  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 36  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 40855.0012, Layer 5 to 4 Message = HQZdmv!+4=GPYclu~H3<  
 A window is not full, sending a message  
 Setting Checksum = -15599  
 B recieved a packet!  
 Setting Checksum = -15599  
 Getting Checksum = -15599  
 Received packet 37 expecting 37  
 Setting Checksum = -39  
 We are sending the packet up  
 B: 40872.9694, Layer 4 to 5 Message = HQZdmv!+4=GPYclu~H3<  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15599  
 Getting Checksum = -15599  
 Received packet 37 expecting 38  
 Resening ACK!  
 A has received a packet.  
 Setting Checksum = -39  
 Getting Checksum = -39  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 37  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 41008.9198, Layer 5 to 4 Message = Id~;Vq.Id~;Vq.Id~;Iq  
 A window is not full, sending a message

Setting Checksum = -16690  
B recieved a packet!  
Setting Checksum = -16690  
Getting Checksum = -16690  
Received packet 38 expecting 38  
Setting Checksum = -40  
We are sending the packet up  
B: 41020.3594, Layer 4 to 5 Message = Id~;Vq.Id~;Vq.Id~;Iq  
A has received a pcket.  
Setting Checksum = -40  
Getting Checksum = -40  
A received an ACK  
Getting unACKed packets  
unACKed packet: 38  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 42911.9951, Layer 5 to 4 Message = JvEq?l:g5b0]+W&R~MyJ  
A window is not full, sending a message  
Setting Checksum = -15623  
B recieved a packet!  
Setting Checksum = -15623  
Getting Checksum = -15623  
Received packet 39 expecting 39  
Setting Checksum = -41  
We are sending the packet up  
B: 42924.5303, Layer 4 to 5 Message = JvEq?l:g5b0]+W&R~MyJ  
A has received a pcket.  
Setting Checksum = -41  
Getting Checksum = -41  
A received an ACK  
Getting unACKed packets  
unACKed packet: 39  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 43956.2581, Layer 5 to 4 Message = K+iI)gG'eE%cC#aA~\_>|  
A window is not full, sending a message  
Setting Checksum = -15474  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15474  
Getting Checksum = -15474  
Received packet 40 expecting 40  
Setting Checksum = -42  
We are sending the packet up  
B: 44025.3165, Layer 4 to 5 Message = K+iI)gG'eE%cC#aA~\_>|  
A Timer Interupt  
We have unacked packets, lets resend them

A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15474  
Getting Checksum = -15474  
Received packet 40 expecting 41  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -42  
Getting Checksum = -42  
A received an ACK  
Getting unACKed packets  
unACKed packet: 40  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 45145.8878, Layer 5 to 4 Message = LLx~pbSE6(wiZL=x~pbS  
A window is not full, sending a message  
Setting Checksum = -17775  
B recieved a packet!  
Setting Checksum = -17775  
Getting Checksum = -17775  
Received packet 41 expecting 41  
Setting Checksum = -43  
We are sending the packet up  
B: 45170.7309, Layer 4 to 5 Message = LLx~pbSE6(wiZL=x~pbS  
A has received a pcket.  
Setting Checksum = -43  
Getting Checksum = -43  
A received an ACK  
Getting unACKed packets  
unACKed packet: 41  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 46742.0540, Layer 5 to 4 Message = dPMVY]`cfilo2ux{~\$'\*  
A window is not full, sending a message  
Setting Checksum = -16461  
B recieved a packet!  
Setting Checksum = -16461  
Getting Checksum = -16461  
Received packet 42 expecting 42  
Setting Checksum = -44  
We are sending the packet up  
B: 46765.1458, Layer 4 to 5 Message = dPMVY]`cfilo2ux{~\$'\*  
A has received a pcket.  
Setting Checksum = -44  
Getting Checksum = -44  
A received an ACK  
Getting unACKed packets  
unACKed packet: 42  
Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window  
A: 47458.2443, Layer 5 to 4 Message = NcwNCWl#7Lau,AUj~5J\_  
A window is not full, sending a message  
Setting Checksum = -15799  
B recieved a packet!  
Setting Checksum = -15799  
Getting Checksum = -15799  
Received packet 43 expecting 43  
Setting Checksum = -45  
We are sending the packet up  
B: 47484.0021, Layer 4 to 5 Message = NcwNCWl#7Lau,AUj~5J\_  
A has received a pcket.  
Setting Checksum = -45  
Getting Checksum = -45  
A received an ACK  
Getting unACKed packets  
unACKed packet: 43  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 49113.0285, Layer 5 to 4 Message = Ou=dORxAgxU{Dj2X~Gm5  
A window is not full, sending a message  
Setting Checksum = -16998  
B recieved a packet!  
Setting Checksum = -16998  
Getting Checksum = -16998  
Received packet 44 expecting 44  
Setting Checksum = -46  
We are sending the packet up  
B: 49117.9462, Layer 4 to 5 Message = Ou=dORxAgxU{Dj2X~Gm5  
A has received a pcket.  
Setting Checksum = 368  
Getting Checksum = -256  
A received a corrupt packet  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16998  
Getting Checksum = -16998  
Received packet 44 expecting 45  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -34  
Getting Checksum = -65326  
A received a corrupt packet  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A Timer Interupt

We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16998  
Getting Checksum = -16998  
Received packet 44 expecting 45  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -46  
Getting Checksum = -46  
A received an ACK  
Getting unACKed packets  
unACKed packet: 44  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 49607.0975, Layer 5 to 4 Message = Pfb;sP'\_8pJ\$[53G~X2j  
A window is not full, sending a message  
Setting Checksum = -14858  
B recieved a packet!  
Setting Checksum = -14858  
Getting Checksum = -14858  
Received packet 45 expecting 45  
Setting Checksum = -47  
We are sending the packet up  
B: 49613.2924, Layer 4 to 5 Message = Pfb;sP'\_8pJ\$[53G~X2j  
A has received a pcket.  
Setting Checksum = -47  
Getting Checksum = -47  
A received an ACK  
Getting unACKed packets  
unACKed packet: 45  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 51274.6590, Layer 5 to 4 Message = Q<(q]HQ|hS>\*s\_J5~jUA  
A window is not full, sending a message  
Setting Checksum = -16302  
B recieved a packet!  
Setting Checksum = -1006649202  
Getting Checksum = -16302  
Detected Corruption...  
Resending last ACK  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16302  
Getting Checksum = -16302  
Received packet 46 expecting 46  
Setting Checksum = -48

We are sending the packet up

B: 51343.1996, Layer 4 to 5 Message = Q<(q]HQ|hS>\*s\_J5~jUA

A has received a packet.

Setting Checksum = -48

Getting Checksum = -48

A received an ACK

Getting unACKed packets

unACKed packet: 46

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 52181.3532, Layer 5 to 4 Message = ROLIFC?R9630-\*'\$~{xu

A window is not full, sending a message

Setting Checksum = -14707

B recieved a packet!

Setting Checksum = -14707

Getting Checksum = -14707

Received packet 47 expecting 47

Setting Checksum = -49

We are sending the packet up

B: 52200.3245, Layer 4 to 5 Message = ROLIFC?R9630-\*'\$~{xu

A has received a packet.

Setting Checksum = -49

Getting Checksum = -49

A received an ACK

Getting unACKed packets

unACKed packet: 47

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 53118.1931, Layer 5 to 4 Message = Sbp~x=LZSw(6ESbp~x=L

A window is not full, sending a message

Setting Checksum = -16906

B recieved a packet!

Setting Checksum = -16906

Getting Checksum = -16906

Received packet 48 expecting 48

Setting Checksum = -50

We are sending the packet up

B: 53120.2291, Layer 4 to 5 Message = Sbp~x=LZSw(6ESbp~x=L

A has received a packet.

Setting Checksum = -50

Getting Checksum = -50

A received an ACK

Getting unACKed packets

unACKed packet: 48

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

A: 55002.9189, Layer 5 to 4 Message = dt6Vv8Xx:Tz<2|>\_~Aa#

A window is not full, sending a message

Setting Checksum = -15789

B recieved a packet!  
Setting Checksum = -15789  
Getting Checksum = -15789  
Received packet 49 expecting 49  
Setting Checksum = -51  
We are sending the packet up  
B: 55004.3105, Layer 4 to 5 Message = dt6Vv8Xx:Tz<2|>\_~Aa#  
A has received a pcket.  
Setting Checksum = -51  
Getting Checksum = -51  
A received an ACK  
Getting unACKed packets  
unACKed packet: 49  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 56214.4122, Layer 5 to 4 Message = U)Z.`3e8j=UCtHyM~R&W  
A window is not full, sending a message  
Setting Checksum = -15955  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15955  
Getting Checksum = -15955  
Received packet 50 expecting 50  
Setting Checksum = -52  
We are sending the packet up  
B: 56279.9713, Layer 4 to 5 Message = U)Z.`3e8j=UCtHyM~R&W  
A has received a pcket.  
Setting Checksum = -52  
Getting Checksum = -52  
A received an ACK  
Getting unACKed packets  
unACKed packet: 50  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 57759.0083, Layer 5 to 4 Message = V;~dI.qV;~dV.qV;~dI.  
A window is not full, sending a message  
Setting Checksum = -16031  
B recieved a packet!  
Setting Checksum = -16031  
Getting Checksum = -16031  
Received packet 51 expecting 51  
Setting Checksum = -53  
We are sending the packet up  
B: 57777.4063, Layer 4 to 5 Message = V;~dI.qV;~dV.qV;~dI.  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B



B recieved a packet!  
 Setting Checksum = -16031  
 Getting Checksum = -16031  
 Received packet 51 expecting 52  
 Resening ACK!  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16031  
 Getting Checksum = -16031  
 Received packet 51 expecting 52  
 Resening ACK!  
 A has received a pcket.  
 Setting Checksum = -53  
 Getting Checksum = -53  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 51  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 59444.6495, Layer 5 to 4 Message = WNE;2)}tkbXOW<3\*~ulc  
 A window is not full, sending a message  
 Setting Checksum = -16898  
 B recieved a packet!  
 Setting Checksum = -16898  
 Getting Checksum = -16898  
 Received packet 52 expecting 52  
 Setting Checksum = -54  
 We are sending the packet up  
 B: 59464.8543, Layer 4 to 5 Message = WNE;2)}tkbXOW<3\*~ulc  
 A has received a pcket.  
 Setting Checksum = -54  
 Getting Checksum = -54  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 52  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 59530.6426, Layer 5 to 4 Message = Xaiqy\$,4<EMU^Xnv~)19  
 A window is not full, sending a message  
 Setting Checksum = -15058  
 B recieved a packet!  
 Setting Checksum = -15058  
 Getting Checksum = -15058  
 Received packet 53 expecting 53  
 Setting Checksum = -55  
 We are sending the packet up  
 B: 59541.7496, Layer 4 to 5 Message = Xaiqy\$,4<EMU^Xnv~)19

A has received a packet.  
Setting Checksum = -39  
Getting Checksum = -65335  
A received a corrupt packet  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15058  
Getting Checksum = -15058  
Received packet 53 expecting 54  
Resening ACK!  
A has received a packet.  
Setting Checksum = -55  
Getting Checksum = -55  
A received an ACK  
Getting unACKed packets  
unACKed packet: 53  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 60661.1022, Layer 5 to 4 Message = YfxIc|8Rl(B[u1Ye~:Tn  
A window is not full, sending a message  
Setting Checksum = -16833  
B recieved a packet!  
Setting Checksum = -16658  
Getting Checksum = -16833  
Detected Corruption...  
Resending last ACK  
A has received a packet.  
Setting Checksum = -55  
Getting Checksum = -55  
A received an ACK  
Getting unACKed packets  
unACKed packet: 54  
Seq number is higher, no packets to ack.  
Sending any messages in the buffer, that fit in window  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16833  
Getting Checksum = -16833  
Received packet 54 expecting 54  
Setting Checksum = -56  
We are sending the packet up  
B: 60741.2961, Layer 4 to 5 Message = YfxIc|8Rl(B[u1Ye~:Tn  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B

B recieved a packet!  
Setting Checksum = -16833  
Getting Checksum = -16833  
Received packet 54 expecting 55  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -44  
Getting Checksum = -16711736  
A received a corrupt packet  
A has received a pcket.  
Setting Checksum = -56  
Getting Checksum = -56  
A received an ACK  
Getting unACKed packets  
unACKed packet: 54  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 62510.0270, Layer 5 to 4 Message = Z(S~LwEp=i6bxZ(Z~LwE  
A window is not full, sending a message  
Setting Checksum = -17069  
B recieved a packet!  
Setting Checksum = -17069  
Getting Checksum = -17069  
Received packet 55 expecting 55  
Setting Checksum = -57  
We are sending the packet up  
B: 62531.4053, Layer 4 to 5 Message = Z(S~LwEp=i6bxZ(Z~LwE  
A has received a pcket.  
Setting Checksum = -57  
Getting Checksum = -57  
A received an ACK  
Getting unACKed packets  
unACKed packet: 55  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 62991.8188, Layer 5 to 4 Message = d:wV5rQ0mL+h2&cB[^<y  
A window is not full, sending a message  
Setting Checksum = -15248  
B recieved a packet!  
Setting Checksum = -15248  
Getting Checksum = -15248  
Received packet 56 expecting 56  
Setting Checksum = -58  
We are sending the packet up  
B: 62999.0432, Layer 4 to 5 Message = d:wV5rQ0mL+h2&cB[^<y  
A: 63008.6171, Layer 5 to 4 Message = ]M=.|m^N>x}n\_O?0~]`P  
Window is full, adding to message buffer  
A has received a pcket.  
Setting Checksum = -58

Getting Checksum = -58  
A received an ACK  
Getting unACKed packets  
unACKed packet: 56  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
Setting Checksum = -17196  
B recieved a packet!  
Setting Checksum = -17196  
Getting Checksum = -17196  
Received packet 57 expecting 57  
Setting Checksum = -59  
We are sending the packet up  
B: 63027.9437, Layer 4 to 5 Message = ]M=.|m^N>x}n\_O?0~]`P  
A has received a pcket.  
Setting Checksum = -59  
Getting Checksum = -59  
A received an ACK  
Getting unACKed packets  
unACKed packet: 57  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 64805.8208, Layer 5 to 4 Message = ^`bdfhjlnprtvxz|~#^'  
A window is not full, sending a message  
Setting Checksum = -18863  
B recieved a packet!  
Setting Checksum = -18863  
Getting Checksum = -18863  
Received packet 58 expecting 58  
Setting Checksum = -60  
We are sending the packet up  
B: 64814.3276, Layer 4 to 5 Message = ^`bdfhjlnprtvxz|~#^'  
A has received a pcket.  
Setting Checksum = -60  
Getting Checksum = -60  
A received an ACK  
Getting unACKed packets  
unACKed packet: 58  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 66345.3260, Layer 5 to 4 Message = \_r(;Ocv,?Sgz0DWk~4H\_  
A window is not full, sending a message  
Setting Checksum = -16165  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B

A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16165  
Getting Checksum = -16165  
Received packet 59 expecting 59  
Setting Checksum = -61  
We are sending the packet up  
B: 66547.5574, Layer 4 to 5 Message = \_r(;Ocv,?Sgz0DWk~4H\_  
A has received a pcket.  
Setting Checksum = -61  
Getting Checksum = -61  
A received an ACK  
Getting unACKed packets  
unACKed packet: 59  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 67793.1776, Layer 5 to 4 Message = `Lq8^%Jo6[#Hm4Y~Fk2  
A window is not full, sending a message  
Setting Checksum = -15120  
B recieved a packet!  
Setting Checksum = -15120  
Getting Checksum = -15120  
Received packet 60 expecting 60  
Setting Checksum = -62  
We are sending the packet up  
B: 67811.3070, Layer 4 to 5 Message = `Lq8^%Jo6[#Hm4Y~Fk2  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15120  
Getting Checksum = -15120  
Received packet 60 expecting 61  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -62  
Getting Checksum = -62  
A received an ACK  
Getting unACKed packets  
unACKed packet: 60  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 68532.4118, Layer 5 to 4 Message = aapI!X1hAwP)`8oH~W0g  
A window is not full, sending a message

Setting Checksum = -15868  
B recieved a packet!  
Setting Checksum = -15868  
Getting Checksum = -15868  
Received packet 61 expecting 61  
Setting Checksum = -63  
We are sending the packet up  
B: 68533.5389, Layer 4 to 5 Message = aapI!X1hAwP)`8oH~W0g  
A has received a pcket.  
Setting Checksum = -63  
Getting Checksum = -63  
A received an ACK  
Getting unACKed packets  
unACKed packet: 61  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 69675.3565, Layer 5 to 4 Message = bLb~iS=(pZExwbL6~iS=  
A window is not full, sending a message  
Setting Checksum = -16940  
B recieved a packet!  
Setting Checksum = -16940  
Getting Checksum = -16940  
Received packet 62 expecting 62  
Setting Checksum = -64  
We are sending the packet up  
B: 69676.6344, Layer 4 to 5 Message = bLb~iS=(pZExwbL6~iS=  
A has received a pcket.  
Setting Checksum = -64  
Getting Checksum = -64  
A received an ACK  
Getting unACKed packets  
unACKed packet: 62  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 70448.1781, Layer 5 to 4 Message = dfZcRNJFB=952-3%~zvr  
A window is not full, sending a message  
Setting Checksum = -15359  
B recieved a packet!  
Setting Checksum = -15359  
Getting Checksum = -15359  
Received packet 63 expecting 63  
Setting Checksum = -65  
We are sending the packet up  
B: 70449.2042, Layer 4 to 5 Message = dfZcRNJFB=952-3%~zvr  
A has received a pcket.  
Setting Checksum = -65  
Getting Checksum = -65  
A received an ACK  
Getting unACKed packets

unACKed packet: 63  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 70685.5185, Layer 5 to 4 Message = dq~.dIVdq~.;IVdq~.;I  
A window is not full, sending a message  
Setting Checksum = -16032  
B recieved a packet!  
Setting Checksum = -16032  
Getting Checksum = -16032  
Received packet 64 expecting 64  
Setting Checksum = -66  
We are sending the packet up  
B: 70704.2245, Layer 4 to 5 Message = dq~.dIVdq~.;IVdq~.;I

Printing the contents of the Simulation Event Q  
Event Time = 70735.518 A: Timer  
Event Time = 71803.125 A: LAYER 5

A has received a pcket.  
Setting Checksum = -66  
Getting Checksum = -66  
A received an ACK  
Getting unACKed packets  
unACKed packet: 64  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window

Printing the contents of the Simulation Event Q

A: 71803.1251, Layer 5 to 4 Message = e&Ed%ec\$Cb#Ba!A`~?\_}  
A window is not full, sending a message  
Setting Checksum = -15650

Printing the contents of the Simulation Event Q  
Event Time = 71853.125 A: Timer  
Event Time = 72901.447 A: LAYER 5

B recieved a packet!  
Setting Checksum = -15650  
Getting Checksum = -15650  
Received packet 65 expecting 65  
Setting Checksum = -67  
We are sending the packet up  
B: 71825.3034, Layer 4 to 5 Message = e&Ed%ec\$Cb#Ba!A`~?\_}  
A has received a pcket.  
Setting Checksum = -67  
Getting Checksum = -67  
A received an ACK  
Getting unACKed packets

unACKed packet: 65  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 72901.4467, Layer 5 to 4 Message = f8i;l>fBrEuHxK{N~Q\$T  
A window is not full, sending a message  
Setting Checksum = -16765  
B recieved a packet!  
Setting Checksum = -16765  
Getting Checksum = -16765  
Received packet 66 expecting 66  
Setting Checksum = -68  
We are sending the packet up  
B: 72906.5670, Layer 4 to 5 Message = f8i;l>fBrEuHxK{N~Q\$T  
A has received a pcket.  
Setting Checksum = -68  
Getting Checksum = -68  
A received an ACK  
Getting unACKed packets  
unACKed packet: 66  
Seq number is higher, no packets to ack.  
Sending any messages in the buffer, that fit in window  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16765  
Getting Checksum = -16765  
Received packet 66 expecting 67  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -68  
Getting Checksum = -68  
A received an ACK  
Getting unACKed packets  
unACKed packet: 66  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 73116.6250, Layer 5 to 4 Message = gKxqU9{gD(jN2tX<~cG+  
A window is not full, sending a message  
Setting Checksum = -15662  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A Timer Interupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15662  
Getting Checksum = -15662



Received packet 67 expecting 67  
Setting Checksum = -69  
We are sending the packet up  
B: 73243.7024, Layer 4 to 5 Message = gKxqU9{gD(jN2tX<~cG+  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
A has received a packet.  
Setting Checksum = -323  
Getting Checksum = 33554363  
A received a corrupt packet  
B recieved a packet!  
Setting Checksum = -15662  
Getting Checksum = -15662  
Received packet 67 expecting 68  
Resending ACK!  
A has received a packet.  
Setting Checksum = -69  
Getting Checksum = -69  
A received an ACK  
Getting unACKed packets  
unACKed packet: 67  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 73696.7441, Layer 5 to 4 Message = h^SI>4\*}hi\_TJ?5+~tj`  
A window is not full, sending a message  
Setting Checksum = -16648  
B recieved a packet!  
Setting Checksum = -16648  
Getting Checksum = -16648  
Received packet 68 expecting 68  
Setting Checksum = -70  
We are sending the packet up  
B: 73710.8228, Layer 4 to 5 Message = h^SI>4\*}hi\_TJ?5+~tj`  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16648  
Getting Checksum = -16648  
Received packet 68 expecting 69  
Resending ACK!  
A has received a packet.  
Setting Checksum = -70  
Getting Checksum = -70  
A received an ACK  
Getting unACKed packets  
unACKed packet: 68  
Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window  
 A: 75231.3331, Layer 5 to 4 Message = ipw~(x6=EiSZbipw~(x6  
 A window is not full, sending a message  
 Setting Checksum = -17402  
 B recieved a packet!  
 Setting Checksum = -17402  
 Getting Checksum = -17402  
 Received packet 69 expecting 69  
 Setting Checksum = -71  
 We are sending the packet up  
 B: 75251.5559, Layer 4 to 5 Message = ipw~(x6=EiSZbipw~(x6  
 A has received a pcket.  
 Setting Checksum = -71  
 Getting Checksum = -71  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 69  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 75569.3661, Layer 5 to 4 Message = d%=Vo\*C[txja24Mf~9Rk  
 A window is not full, sending a message  
 Setting Checksum = -16694  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16694  
 Getting Checksum = -16694  
 Received packet 70 expecting 70  
 Setting Checksum = -72  
 We are sending the packet up  
 B: 75649.7481, Layer 4 to 5 Message = d%=Vo\*C[txja24Mf~9Rk  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16694  
 Getting Checksum = -16694  
 Received packet 70 expecting 71  
 Resening ACK!  
 A has received a pcket.  
 Setting Checksum = -72  
 Getting Checksum = -72  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 70  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A has received a pcket.

Setting Checksum = -72  
 Getting Checksum = -72  
 A: 75869.1295, Layer 5 to 4 Message = k7b.X%OyFp<k3^\*T~KuB  
 A window is not full, sending a message  
 Setting Checksum = -15997  
 B recieved a packet!  
 Setting Checksum = -15997  
 Getting Checksum = -15997  
 Received packet 71 expecting 71  
 Setting Checksum = -73  
 We are sending the packet up  
 B: 75880.6328, Layer 4 to 5 Message = k7b.X%OyFp<k3^\*T~KuB  
 A has received a pcket.  
 Setting Checksum = -73  
 Getting Checksum = -73  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 71  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 76796.6220, Layer 5 to 4 Message = lf(dB){9uS1ml)3C~]:v  
 A window is not full, sending a message  
 Setting Checksum = -16192  
 B recieved a packet!  
 Setting Checksum = -16192  
 Getting Checksum = -16192  
 Received packet 72 expecting 72  
 Setting Checksum = -74  
 We are sending the packet up  
 B: 76797.8162, Layer 4 to 5 Message = lf(dB){9uS1ml)3C~]:v  
 A has received a pcket.  
 Setting Checksum = -74  
 Getting Checksum = -74  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 72  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 77263.9061, Layer 5 to 4 Message = m]L;+xhWG6&scmB1~n^M  
 A window is not full, sending a message  
 Setting Checksum = -16505  
 B recieved a packet!  
 Setting Checksum = -16505  
 Getting Checksum = -16505  
 Received packet 73 expecting 73  
 Setting Checksum = -75  
 We are sending the packet up  
 B: 77293.1322, Layer 4 to 5 Message = m]L;+xhWG6&scmB1~n^M  
 A Timer Interupt

We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16505  
Getting Checksum = -16505  
Received packet 73 expecting 74  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -75  
Getting Checksum = -75  
A received an ACK  
Getting unACKed packets  
unACKed packet: 73  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A has received a pcket.  
Setting Checksum = -75  
Getting Checksum = -75  
A: 77534.9485, Layer 5 to 4 Message = nopqrstuvwxyz{n}~!#\$  
A window is not full, sending a message  
Setting Checksum = -18210  
B recieved a packet!  
Setting Checksum = -18210  
Getting Checksum = -18210  
Received packet 74 expecting 74  
Setting Checksum = -76  
We are sending the packet up  
B: 77561.1713, Layer 4 to 5 Message = nopqrstuvwxyz{n}~!#\$  
A has received a pcket.  
Setting Checksum = -76  
Getting Checksum = -76  
A received an ACK  
Getting unACKed packets  
unACKed packet: 74  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 78734.8927, Layer 5 to 4 Message = o\$6I[n#5HZm!4GYo~3FX  
A window is not full, sending a message  
Setting Checksum = -15046  
B recieved a packet!  
Setting Checksum = -15046  
Getting Checksum = -15046  
Received packet 75 expecting 75  
Setting Checksum = -77  
We are sending the packet up  
B: 78764.4714, Layer 4 to 5 Message = o\$6I[n#5HZm!4GYo~3FX  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B

A has received a packet.  
Setting Checksum = -77  
Getting Checksum = -77  
A received an ACK  
Getting unACKed packets  
unACKed packet: 75  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
B recieved a packet!  
Setting Checksum = -15046  
Getting Checksum = -15046  
Received packet 75 expecting 76  
Resening ACK!  
A has received a packet.  
Setting Checksum = -77  
Getting Checksum = -77  
A: 79211.6593, Layer 5 to 4 Message = p6Z~EixSw=b(Lp6ZpEix  
A window is not full, sending a message  
Setting Checksum = -17321  
B recieved a packet!  
Setting Checksum = -17321  
Getting Checksum = -17321  
Received packet 76 expecting 76  
Setting Checksum = -78  
We are sending the packet up  
B: 79224.2810, Layer 4 to 5 Message = p6Z~EixSw=b(Lp6ZpEix  
A has received a packet.  
Setting Checksum = -78  
Getting Checksum = -78  
A received an ACK  
Getting unACKed packets  
unACKed packet: 76  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 79255.2926, Layer 5 to 4 Message = dI~V.d;qI~V.2;qI~q.d  
A window is not full, sending a message  
Setting Checksum = -16283  
B recieved a packet!  
Setting Checksum = -16283  
Getting Checksum = -16283  
Received packet 77 expecting 77  
Setting Checksum = -79  
We are sending the packet up  
B: 79260.2640, Layer 4 to 5 Message = dI~V.d;qI~V.2;qI~q.d  
A has received a packet.  
Setting Checksum = -79  
Getting Checksum = -79  
A received an ACK  
Getting unACKed packets

unACKed packet: 77  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 80079.0371, Layer 5 to 4 Message = r[E.u\_H1xbK4{eN7~hr:  
 A window is not full, sending a message  
 Setting Checksum = -16972  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16972  
 Getting Checksum = -16972  
 Received packet 78 expecting 78  
 Setting Checksum = -80  
 We are sending the packet up  
 B: 80152.9799, Layer 4 to 5 Message = r[E.u\_H1xbK4{eN7~hr:  
 A has received a pcket.  
 Setting Checksum = -80  
 Getting Checksum = -80  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 78  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 81290.9201, Layer 5 to 4 Message = snid\_YTOJE?:50+&~yts  
 A window is not full, sending a message  
 Setting Checksum = -15841  
 B recieved a packet!  
 Setting Checksum = -15841  
 Getting Checksum = -15841  
 Received packet 79 expecting 79  
 Setting Checksum = -81  
 We are sending the packet up  
 B: 81298.9026, Layer 4 to 5 Message = snid\_YTOJE?:50+&~yts  
 A has received a pcket.  
 Setting Checksum = -81  
 Getting Checksum = -81  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 79  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 82259.7483, Layer 5 to 4 Message = t#x;HTamy(4AMYfr~-9F  
 A window is not full, sending a message  
 Setting Checksum = -15505  
 B recieved a packet!  
 Setting Checksum = -16066  
 Getting Checksum = -15505  
 Detected Corruption...

Resending last ACK  
 A has received a packet.  
 Setting Checksum = -81  
 Getting Checksum = -81  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 80  
 Seq number is higher, no packets to ack.  
 Sending any messages in the buffer, that fit in window  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15505  
 Getting Checksum = -15505  
 Received packet 80 expecting 80  
 Setting Checksum = -82  
 We are sending the packet up  
 B: 82325.3434, Layer 4 to 5 Message = t#x;HTamy(4AMYfr~-9F  
 A has received a packet.  
 Setting Checksum = -82  
 Getting Checksum = -82  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 80  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 83882.7622, Layer 5 to 4 Message = uuSq1Om-Ki)Ge%3a~>]z  
 A window is not full, sending a message  
 Setting Checksum = -15924  
 B recieved a packet!  
 Setting Checksum = -15924  
 Getting Checksum = -15924  
 Received packet 81 expecting 81  
 Setting Checksum = -83  
 We are sending the packet up  
 B: 83911.8104, Layer 4 to 5 Message = uuSq1Om-Ki)Ge%3a~>]z  
 A Timer Interrupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 A has received a packet.  
 Setting Checksum = -257  
 Getting Checksum = -11403347  
 A received a corrupt packet  
 B recieved a packet!  
 Setting Checksum = -15924  
 Getting Checksum = -15924  
 Received packet 81 expecting 82  
 Resening ACK!

A has received a packet.  
Setting Checksum = -83  
Getting Checksum = -83  
A received an ACK  
Getting unACKed packets  
unACKed packet: 81  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 85289.0056, Layer 5 to 4 Message = vHvIxJyKzL{M|N}O~P!Q  
A window is not full, sending a message  
Setting Checksum = -17394  
B recieved a packet!  
Setting Checksum = -17394  
Getting Checksum = -17394  
Received packet 82 expecting 82  
Setting Checksum = -84  
We are sending the packet up  
B: 85300.6390, Layer 4 to 5 Message = vHvIxJyKzL{M|N}O~P!Q  
A has received a packet.  
Setting Checksum = -84  
Getting Checksum = -84  
A received an ACK  
Getting unACKed packets  
unACKed packet: 82  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 86237.1092, Layer 5 to 4 Message = wZ=wbE(iLxpS6wZ=~bE(  
A window is not full, sending a message  
Setting Checksum = -16140  
B recieved a packet!  
Setting Checksum = -16140  
Getting Checksum = -16140  
Received packet 83 expecting 83  
Setting Checksum = -85  
We are sending the packet up  
B: 86250.9894, Layer 4 to 5 Message = wZ=wbE(iLxpS6wZ=~bE(  
A has received a packet.  
Setting Checksum = -85  
Getting Checksum = -85  
A received an ACK  
Getting unACKed packets  
unACKed packet: 83  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 87835.2223, Layer 5 to 4 Message = dmbVx?4){peY2C7,~sh]  
A window is not full, sending a message  
Setting Checksum = -16534  
B recieved a packet!  
Setting Checksum = -16534



Getting Checksum = -16534  
Received packet 84 expecting 84  
Setting Checksum = -86  
We are sending the packet up  
B: 87855.7987, Layer 4 to 5 Message = dmbVx?4){peY2C7,~sh]  
A has received a packet.  
Setting Checksum = -86  
Getting Checksum = -86  
A received an ACK  
Getting unACKed packets  
unACKed packet: 84  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 88177.3892, Layer 5 to 4 Message = y!(.4yAGMSY`flrx~-3  
A window is not full, sending a message  
Setting Checksum = -15828  
B recieved a packet!  
Setting Checksum = -15828  
Getting Checksum = -15828  
Received packet 85 expecting 85  
Setting Checksum = -87  
We are sending the packet up  
B: 88194.7570, Layer 4 to 5 Message = y!(.4yAGMSY`flrx~-3  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -14940  
Getting Checksum = -15828  
Detected Corruption...  
Resending last ACK  
A has received a packet.  
Setting Checksum = -87  
Getting Checksum = -87  
A received an ACK  
Getting unACKed packets  
unACKed packet: 85  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 89148.1108, Layer 5 to 4 Message = z4Ld{5ze|6Nf}7Og~8Ph  
A window is not full, sending a message  
Setting Checksum = -17417  
B recieved a packet!  
Setting Checksum = -17417  
Getting Checksum = -17417  
Received packet 86 expecting 86  
Setting Checksum = -88  
We are sending the packet up  
B: 89176.0674, Layer 4 to 5 Message = z4Ld{5ze|6Nf}7Og~8Ph

A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -17417  
Getting Checksum = -17417  
Received packet 86 expecting 87  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -88  
Getting Checksum = -88  
A received an ACK  
Getting unACKed packets  
unACKed packet: 86  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 89803.3133, Layer 5 to 4 Message = {Gp;e0Y{NwCl7a,U~Js>  
A window is not full, sending a message  
Setting Checksum = -16486  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16486  
Getting Checksum = -16486  
Received packet 87 expecting 87  
Setting Checksum = -89  
We are sending the packet up  
B: 89857.0703, Layer 4 to 5 Message = {Gp;e0Y{NwCl7a,U~Js>  
A has received a pcket.  
Setting Checksum = -5701634  
Getting Checksum = -89  
A received a corrupt packet  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -16486  
Getting Checksum = -16486  
Received packet 87 expecting 88  
Resening ACK!  
A has received a pcket.  
Setting Checksum = -89  
Getting Checksum = -89  
A received an ACK  
Getting unACKed packets  
unACKed packet: 87  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window

A: 90590.7351, Layer 5 to 4 Message = |Y6qN+fC|Z7rO,gD~[8s  
 A window is not full, sending a message  
 Setting Checksum = -16577  
 B recieved a packet!  
 Setting Checksum = -16577  
 Getting Checksum = -16577  
 Received packet 88 expecting 88  
 Setting Checksum = -90  
 We are sending the packet up  
 B: 90606.9919, Layer 4 to 5 Message = |Y6qN+fC|Z7rO,gD~[8s  
 A has received a pcket.  
 Setting Checksum = -90  
 Getting Checksum = -90  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 88  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 91236.6225, Layer 5 to 4 Message = }lZI7&raO},xgUD2~m[J  
 A window is not full, sending a message  
 Setting Checksum = -16843  
 B recieved a packet!  
 Setting Checksum = -16843  
 Getting Checksum = -16843  
 Received packet 89 expecting 89  
 Setting Checksum = -91  
 We are sending the packet up  
 B: 91262.8598, Layer 4 to 5 Message = }lZI7&raO},xgUD2~m[J  
 A has received a pcket.  
 Setting Checksum = -91  
 Getting Checksum = -91  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 89  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 92967.4985, Layer 5 to 4 Message = ~fDUgx,=Oa~&7I3l}1CT  
 A window is not full, sending a message  
 Setting Checksum = -15048  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -15048  
 Getting Checksum = -15048  
 Received packet 90 expecting 90  
 Setting Checksum = -92  
 We are sending the packet up  
 B: 93025.5863, Layer 4 to 5 Message = ~fDUgx,=Oa~&7I3l}1CT

A has received a packet.  
Setting Checksum = -92  
Getting Checksum = -92  
A received an ACK  
Getting unACKed packets  
unACKed packet: 90  
Ack'd all packets, stopping timer  
Sending any messages in the buffer, that fit in window  
A: 94064.6631, Layer 5 to 4 Message = !3EVhy->Pbs'2J[m~2DU  
A window is not full, sending a message  
Setting Checksum = -15541  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -15541  
Getting Checksum = -15541  
Received packet 91 expecting 91  
Setting Checksum = -93  
We are sending the packet up  
B: 94130.3672, Layer 4 to 5 Message = !3EVhy->Pbs'2J[m~2DU  
A has received a packet.  
Setting Checksum = -93  
Getting Checksum = -93  
A received an ACK  
Getting unACKed packets  
unACKed packet: 91  
Ack'd all packets, stopping timer  
Sending any messages in the buffer, that fit in window  
A: 94760.8042, Layer 5 to 4 Message = ##i.Qt9]!Eh-Ps8[~Dg,  
A window is not full, sending a message  
Setting Checksum = -15259  
B recieved a packet!  
Setting Checksum = -15259  
Getting Checksum = -15259  
Received packet 92 expecting 92  
Setting Checksum = -94  
We are sending the packet up  
B: 94782.0355, Layer 4 to 5 Message = ##i.Qt9]!Eh-Ps8[~Dg,  
A has received a packet.  
Setting Checksum = -94  
Getting Checksum = -94  
A received an ACK  
Getting unACKed packets  
unACKed packet: 92  
Ack'd all packets, stopping timer  
Sending any messages in the buffer, that fit in window  
A: 96141.8785, Layer 5 to 4 Message = \$X\$d:oFzQ([3h>sJ~U,a  
A window is not full, sending a message

Setting Checksum = -15984  
B recieved a packet!  
Setting Checksum = -15984  
Getting Checksum = -15984  
Received packet 93 expecting 93  
Setting Checksum = -95  
We are sending the packet up  
B: 96154.7957, Layer 4 to 5 Message = \$X\$d:oFzQ(l3h>sJ~U,a  
A has received a pcket.  
Setting Checksum = -95  
Getting Checksum = -95  
A received an ACK  
Getting unACKed packets  
unACKed packet: 93  
Ack'd all packets, stoping timer  
Sending any messages in the buffer, that fit in window  
A: 98070.7690, Layer 5 to 4 Message = %kS%\$jR:#iQ9!hP8~gO7  
A window is not full, sending a message  
Setting Checksum = -14655  
B recieved a packet!  
Setting Checksum = -14655  
Getting Checksum = -14655  
Received packet 94 expecting 94  
Setting Checksum = -96  
We are sending the packet up  
B: 98083.7440, Layer 4 to 5 Message = %kS%\$jR:#iQ9!hP8~gO7  
A has received a pcket.  
Setting Checksum = 16777120  
Getting Checksum = 16777120  
A received an ACK  
Getting unACKed packets  
unACKed packet: 94  
Seq number is higher, no packets to ack.  
Sending any messages in the buffer, that fit in window  
A Timer Interrupt  
We have unacked packets, lets resend them  
A is sending unacked packet to B  
B recieved a packet!  
Setting Checksum = -13927  
Getting Checksum = -14655  
Detected Corruption...  
Resending last ACK  
A has received a pcket.  
Setting Checksum = -96  
Getting Checksum = -96  
A received an ACK  
Getting unACKed packets  
unACKed packet: 94  
Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window  
 A: 98184.6470, Layer 5 to 4 Message = &}wq&e\_XRLF?93-'\~xrl  
 A window is not full, sending a message  
 Setting Checksum = -16096  
 B recieved a packet!  
 Setting Checksum = -16096  
 Getting Checksum = -16096  
 Received packet 95 expecting 95  
 Setting Checksum = -97  
 We are sending the packet up  
 B: 98185.7032, Layer 4 to 5 Message = &}wq&e\_XRLF?93-'\~xrl  
 A has received a pcket.  
 Setting Checksum = -97  
 Getting Checksum = -97  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 95  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 99580.7683, Layer 5 to 4 Message = '2=IT'kv\$x:FQ]hs~,7C  
 A window is not full, sending a message  
 Setting Checksum = -15594  
 B recieved a packet!  
 Setting Checksum = -15594  
 Getting Checksum = -15594  
 Received packet 96 expecting 96  
 Setting Checksum = -98  
 We are sending the packet up  
 B: 99608.7914, Layer 4 to 5 Message = '2=IT'kv\$x:FQ]hs~,7C  
 A has received a pcket.  
 Setting Checksum = -98  
 Getting Checksum = -98  
 A received an ACK  
 Getting unACKed packets  
 unACKed packet: 96  
 Ack'd all packets, stoping timer  
 Sending any messages in the buffer, that fit in window  
 A: 101378.3730, Layer 5 to 4 Message = (Eb~=Z(6SpxLi(Eb~=Zw  
 A window is not full, sending a message  
 Setting Checksum = -16911  
 A Timer Interupt  
 We have unacked packets, lets resend them  
 A is sending unacked packet to B  
 B recieved a packet!  
 Setting Checksum = -16911  
 Getting Checksum = -16911  
 Received packet 97 expecting 97  
 Setting Checksum = -99  
 We are sending the packet up

B: 101447.6133, Layer 4 to 5 Message = (Eb~Z(6SpxLi(Eb~Zw

Printing the contents of the Simulation Event Q

Event Time = 101478.373 A: Timer

Event Time = 102877.046 A: LAYER 5

A has received a packet.

Setting Checksum = -99

Getting Checksum = -99

A received an ACK

Getting unACKed packets

unACKed packet: 97

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

Printing the contents of the Simulation Event Q

A: 102877.0456, Layer 5 to 4 Message = dW(V'U&)%S\$R2Q!P~O}N

A window is not full, sending a message

Setting Checksum = -14331

Printing the contents of the Simulation Event Q

Event Time = 102927.046 A: Timer

Event Time = 103989.475 A: LAYER 5

B recieved a packet!

Setting Checksum = -14331

Getting Checksum = -14331

Received packet 98 expecting 98

Setting Checksum = -100

We are sending the packet up

B: 102903.3003, Layer 4 to 5 Message = dW(V'U&)%S\$R2Q!P~O}N

A Timer Interrupt

We have unacked packets, lets resend them

A is sending unacked packet to B

A has received a packet.

Setting Checksum = -100

Getting Checksum = -100

A received an ACK

Getting unACKed packets

unACKed packet: 98

Ack'd all packets, stoping timer

Sending any messages in the buffer, that fit in window

B recieved a packet!

Setting Checksum = -14331

Getting Checksum = -14331

Received packet 98 expecting 99

Resening ACK!

A has received a packet.

Setting Checksum = -100  
Getting Checksum = -100  
A: 103989.4745, Layer 5 to 4 Message = \*fL.nP2r\*6vX:z3>~aC%  
A window is not full, sending a message  
Setting Checksum = -14900  
B recieved a packet!  
Setting Checksum = -14900  
Getting Checksum = -14900  
Received packet 99 expecting 99  
Setting Checksum = -101  
We are sending the packet up  
B: 104012.7306, Layer 4 to 5 Message = \*fL.nP2r\*6vX:z3>~aC%

Simulator terminated at time 104039.474513  
after receiving 100 msgs at layer5

Simulator Analysis:

Number of messages sent from 5 to 4: 100  
Number of messages received at Layer 5, side A: 0  
Number of messages received at Layer 5, side B: 100  
Number of messages incorrectly received at layer 5: 0  
Number of packets entering the network: 292  
Average number of packets already in network: 0.010  
Number of packets that the network lost: 34  
Number of packets that the network corrupted: 23  
Number of packets that the network put out of order: 22