

```
-- * Network Simulator v1.0 * --
Enter number of messages to simulate (> 0): [10] 30
Enter packet loss probability (0.0 for no loss): [0.0] 0.1
Enter packet corruption probability (0.0 for no corruption): [0.0] 0.1
Enter average time between messages from sender's layer 5 (> 0.0):
[1000] 50
Enter window size (> 0): [8] 4
Enter retransmission timeout (>0.0) [15.0] 30
Enter trace level (>= 0): [0] 2
Enter random seed: [0] 1000
```

```
EVENT time: 86.43452253791925  type: 1  entity: 0
A: Sended packet 0!!!
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```
EVENT time: 95.46330149235511  type: 2  entity: 1
B: Correct packet 0, deliver it to upper layer!!!
B: Sended ACK for packet 0!!!
B: Now expecting packet 1!!!
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EVENT time: 99.0155034028138  type: 2  entity: 0
A: Received an ACK of packet 0!!!
A: Moved base to 1!!!
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```
EVENT time: 110.67537461470383  type: 1  entity: 0
A: Sended packet 1!!!
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```
EVENT time: 113.02233954893644  type: 2  entity: 1
B: Correct packet 1, deliver it to upper layer!!!
B: Sended ACK for packet 1!!!
B: Now expecting packet 2!!!
```

```
EVENT time: 122.72872096926787  type: 2  entity: 0
A: Received an ACK of packet 1!!!
A: Moved base to 2!!!
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```
EVENT time: 124.87563707388531  type: 1  entity: 0
A: Sended packet 2!!!
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```
EVENT time: 131.7070833460494  type: 2  entity: 1
B: Correct packet 2, deliver it to upper layer!!!
B: Sended ACK for packet 2!!!
B: Now expecting packet 3!!!
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```
EVENT time: 141.6060060426649  type: 2  entity: 0
A: Received an ACK of packet 2!!!
A: Moved base to 3!!!
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```
EVENT time: 149.69634083071384  type: 1  entity: 0
A: Sended packet 3!!!
```

EVENT time: 155.01300088503677 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 163.29303872798852 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 246.31794183172093 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 251.2624286629841 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 252.67662587359231 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 314.1605883968627 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 319.6081423383282 type: 1 entity: 0  
A: Sended packet 6!!!

EVENT time: 319.75246436964017 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 320.8950163274026 type: 2 entity: 1  
B: Correct packet 6, deliver it to upper layer!!!  
B: Sended ACK for packet 6!!!  
B: Now expecting packet 7!!!

EVENT time: 328.74114200262454 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!  
startTimer: Warning: Attempting to start a timer that is already running

EVENT time: 336.01590014343697 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!

EVENT time: 375.70421460615864 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 378.77300332651754 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 379.99081392864775 type: 2 entity: 0  
A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 394.5677053132725 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!

EVENT time: 399.2952055421613 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 403.84719382305366 type: 2 entity: 0  
A: Received an ACK of packet 0!!!  
A: Moved base to 1!!!

EVENT time: 425.5592516861476 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 434.6354564043092 type: 1 entity: 0  
toLayer3: packet being lost  
A: Sended packet 2!!!

EVENT time: 435.1250038148136 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 438.46269112216555 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!  
startTimer: Warning: Attempting to start a timer that is already running

EVENT time: 455.5592516861476 type: 0 entity: 0  
toLayer3: packet being lost  
A: Resended packet 2!!!

EVENT time: 485.5592516861476 type: 0 entity: 0  
A: Resended packet 2!!!  
Retransmission after RT0

// Case 3:

EVENT time: 490.86904507583847 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!

B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 500.8174077578051 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 523.4107486190375 type: 1 entity: 0  
toLayer3: packet being corrupted  
A: Sended packet 3!!!

EVENT time: 525.6324655903805 type: 2 entity: 1

EVENT time: 553.4107486190375 type: 0 entity: 0  
toLayer3: packet being lost  
A: Resended packet 3!!! // Case 3:  
Retransmission after RT0

EVENT time: 583.4107486190375 type: 0 entity: 0  
A: Resended packet 3!!! // Case 3:  
Retransmission after RT0

EVENT time: 587.2395397808771 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 589.1195715201269 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 591.2717062898648 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 598.4651631214332 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 607.5332193975647 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 646.9405194250313 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 655.5597705008088 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 659.5959349345378 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!

EVENT time: 701.9470809045687 type: 1 entity: 0  
A: Sended packet 6!!!

EVENT time: 703.1448408459731 type: 2 entity: 1  
B: Correct packet 6, deliver it to upper layer!!!  
B: Sended ACK for packet 6!!!  
B: Now expecting packet 7!!!

EVENT time: 710.1284524063846 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!

EVENT time: 755.2201910458693 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 758.9292275765251 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
toLayer3: packet being lost  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 785.2201910458693 type: 0 entity: 0  
A: Resended packet 7!!!

EVENT time: 786.31275368511 type: 2 entity: 1  
B: Duplicate packet 7!!!  
B: Sended ACK for packet 7!!!

EVENT time: 794.8671834467605 type: 2 entity: 0  
A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 841.0626544999543 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!

EVENT time: 850.8239692373426 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
toLayer3: packet being corrupted  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 852.1782891323589 type: 2 entity: 0  
Corrupted ACK !!!

EVENT time: 871.0626544999543 type: 0 entity: 0  
A: Resended packet 0!!!

EVENT time: 874.6887417218544 type: 2 entity: 1  
B: Duplicate packet 0!!!  
toLayer3: packet being lost  
B: Sended ACK for packet 0!!!

EVENT time: 901.0626544999543 type: 0 entity: 0  
A: Resended packet 0!!!

EVENT time: 906.5457625049594 type: 2 entity: 1  
B: Duplicate packet 0!!!  
toLayer3: packet being lost  
B: Sended ACK for packet 0!!!

EVENT time: 911.3498336741235 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 919.850154118473 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 929.6482741782893 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!  
send\_base moved from 0 to 2

// Case 2:

EVENT time: 945.945616016114 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 951.215033417768 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 954.031403546251 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 1023.6732078005311 type: 1 entity: 0  
A: Sended packet 3!!!

EVENT time: 1030.7139500106816 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 1032.0657979064304 type: 1 entity: 0

A: Sended packet 4!!!

EVENT time: 1034.6155278176216 type: 2 entity: 0

A: Received an ACK of packet 3!!!

A: Moved base to 4!!!

startTimer: Warning: Attempting to start a timer that is already running

EVENT time: 1038.2850123599965 type: 2 entity: 1

B: Correct packet 4, deliver it to upper layer!!!

toLayer3: packet being corrupted

B: Sended ACK for packet 4!!!

B: Now expecting packet 5!!!

EVENT time: 1046.395580919828 type: 2 entity: 0

Corrupted ACK !!!

EVENT time: 1051.1001922666098 type: 1 entity: 0

A: Sended packet 5!!!

EVENT time: 1053.6732078005311 type: 0 entity: 0

A: Resended packet 4!!!

toLayer3: packet being lost

startTimer: Warning: Attempting to start a timer that is already running

A: Resended packet 5!!!

EVENT time: 1054.7652821436202 type: 2 entity: 1

B: Correct packet 5, deliver it to upper layer!!!

B: Sended ACK for packet 5!!!

B: Now expecting packet 6!!!

EVENT time: 1056.1978820154425 type: 2 entity: 0

A: Received an ACK of packet 5!!!

A: Moved base to 6!!!

EVENT time: 1060.280251472518 type: 2 entity: 1

B: Duplicate packet 4!!!

B: Sended ACK for packet 4!!!

EVENT time: 1068.7651905880916 type: 2 entity: 0

EVENT time: 1080.3582873012483 type: 1 entity: 0

A: Sended packet 6!!!

EVENT time: 1089.1390423291728 type: 2 entity: 1

B: Correct packet 6, deliver it to upper layer!!!

B: Sended ACK for packet 6!!!

B: Now expecting packet 7!!!

EVENT time: 1092.1079134495071 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 1095.08386486404 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 1098.0708639790034 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!  
startTimer: Warning: Attempting to start a timer that is already running

EVENT time: 1102.3490096743676 type: 2 entity: 0  
A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 1128.4096804712058 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!

EVENT time: 1132.2121036408582 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
toLayer3: packet being lost  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 1158.4096804712058 type: 0 entity: 0  
toLayer3: packet being lost  
A: Resended packet 0!!!

EVENT time: 1179.589220862453 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 1183.8599505600146 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 1188.4096804712058 type: 0 entity: 0  
A: Resended packet 0!!!  
startTimer: Warning: Attempting to start a timer that is already running  
A: Resended packet 1!!!

EVENT time: 1190.527024140141 type: 2 entity: 1  
B: Duplicate packet 0!!!  
B: Sended ACK for packet 0!!!



EVENT time: 1192.358348338267 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!  
send\_base moved from 0 to 2

// Case 2:

EVENT time: 1193.4837488937042 type: 2 entity: 1  
B: Duplicate packet 1!!!  
toLayer3: packet being lost  
B: Sended ACK for packet 1!!!

EVENT time: 1197.4879604480116 type: 2 entity: 0

EVENT time: 1254.3748283333841 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 1257.6688436536758 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 1264.1619006927701 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 1300.479140598773 type: 1 entity: 0  
toLayer3: packet being corrupted  
A: Sended packet 3!!!

EVENT time: 1306.7041230506302 type: 2 entity: 1

EVENT time: 1330.479140598773 type: 0 entity: 0  
A: Resended packet 3!!!

EVENT time: 1339.8333994567704 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 1346.7629016998808 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 1360.8417004913479 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 1369.273079622791 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

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EVENT time: 1374.413678395947  type: 2  entity: 0
A: Received an ACK of packet 4!!!
A: Moved base to 5!!!

EVENT time: 1440.5163731803336  type: 1  entity: 0
A: Sended packet 5!!!

EVENT time: 1446.7828302865685  type: 2  entity: 1
B: Correct packet 5, deliver it to upper layer!!!
B: Sended ACK for packet 5!!!
B: Now expecting packet 6!!!

EVENT time: 1455.6792199468975  type: 2  entity: 0
A: Received an ACK of packet 5!!!
A: Moved base to 6!!!

EVENT time: 1523.838007751701  type: 1  entity: 0
Simulator terminated at time 1523.838007751701

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=====STATISTICS=====
Number of original packets transmitted by A: 30
Number of retransmissions by A: 11
Number of data packets delivered to layer 5 at B: 30
Number of ACK packets sent by B: 36
Number of corrupted packets: 4
Ratio of lost packets: 0.17073170731707318
Ratio of corrupted packets: 0.0975609756097561
Average RTT: 12.067180527598694
Average communication time: 18.346914070050154
=====

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The initial value of my retransmission timer is 10.0 because the given average RTT is about 10.0, but with this value, retransmissions always happen even if the packet is not lost. I looked at the output trace and noticed that the RTT sometimes exceeded 10.0, so I set the retransmission timer to a higher value, which is 30.0, then the simulation worked well.

Case1:

```

-- * Network Simulator v1.0 * --
Enter number of messages to simulate (> 0): [10] 30
Enter packet loss probability (0.0 for no loss): [0.0]
Enter packet corruption probability (0.0 for no corruption): [0.0]

```

Enter average time between messages from sender's layer 5 (> 0.0):  
[1000] 200

Enter window size (> 0): [8] 4

Enter retransmission timeout (>0.0) [15.0] 30

Enter trace level (>= 0): [0] 2

Enter random seed: [0] 100

EVENT time: 154.5701467940306 type: 1 entity: 0  
A: Sended packet 0!!!

EVENT time: 159.29764702291942 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 167.09317300943025 type: 2 entity: 0  
A: Received an ACK of packet 0!!!  
A: Moved base to 1!!!

EVENT time: 440.1257362590411 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 447.39170506912444 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 451.5544907986694 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!

EVENT time: 715.5369731742302 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 724.4069948423719 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 728.4947965941343 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 968.4499649037141 type: 1 entity: 0  
A: Sended packet 3!!!

EVENT time: 970.9913937803277 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 974.2074037903989 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 1045.5275124362927 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 1047.4405041657767 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 1055.6235847041232 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 1058.6260567033908 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 1066.5135959959716 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 1070.7527390362256 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!

EVENT time: 1357.0848719748528 type: 1 entity: 0  
A: Sended packet 6!!!

EVENT time: 1365.5758537553027 type: 2 entity: 1  
B: Correct packet 6, deliver it to upper layer!!!  
B: Sended ACK for packet 6!!!  
B: Now expecting packet 7!!!

EVENT time: 1370.7538071840572 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!

EVENT time: 1756.413464766381 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 1760.2395092623676 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 1768.9386883144628 type: 2 entity: 0

A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 2097.1465193639942 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!

EVENT time: 2101.1219824823756 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 2102.865230262154 type: 2 entity: 0  
A: Received an ACK of packet 0!!!  
A: Moved base to 1!!!

EVENT time: 2121.9397564622946 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 2126.1635181737724 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 2128.4712057863094 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!

EVENT time: 2260.274056215095 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 2268.170384838405 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 2271.4015015106665 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 2352.9892880031744 type: 1 entity: 0  
A: Sended packet 3!!!

EVENT time: 2360.342875453963 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 2368.1219214453567 type: 2 entity: 0  
A: Received an ACK of packet 3!!!

A: Moved base to 4!!!

EVENT time: 2602.313303018281 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 2607.386883144628 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 2611.2997222815643 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 2731.7850276192517 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 2733.003662221138 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 2737.326303903318 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!

EVENT time: 2985.4548783837404 type: 1 entity: 0  
A: Sended packet 6!!!

EVENT time: 2987.894680623799 type: 2 entity: 1  
B: Correct packet 6, deliver it to upper layer!!!  
B: Sended ACK for packet 6!!!  
B: Now expecting packet 7!!!

EVENT time: 2994.8384655293444 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!

EVENT time: 3131.0403759880373 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 3135.90218817713 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 3143.1269569994206 type: 2 entity: 0  
A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 3440.998565630055 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!

EVENT time: 3444.0115970336014 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 3449.1549424726104 type: 2 entity: 0  
A: Received an ACK of packet 0!!!  
A: Moved base to 1!!!

EVENT time: 3597.314371166113 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 3603.18640705588 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 3605.5410626545004 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!

EVENT time: 3898.287911618397 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 3905.2830591753905 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 3907.4731894894257 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 4163.42051454207 type: 1 entity: 0  
A: Sended packet 3!!!

EVENT time: 4173.235114597003 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 4175.178868984039 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 4311.947996459853 type: 1 entity: 0

A: Sended packet 4!!!

EVENT time: 4313.408337656789 type: 2 entity: 1  
B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 4318.7291177098905 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 4489.553514206366 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 4497.35123752556 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 4503.830011902219 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!

EVENT time: 4834.656819360943 type: 1 entity: 0  
A: Sended packet 6!!!

EVENT time: 4838.263679921873 type: 2 entity: 1  
B: Correct packet 6, deliver it to upper layer!!!  
B: Sended ACK for packet 6!!!  
B: Now expecting packet 7!!!

EVENT time: 4844.392254402295 type: 2 entity: 0  
A: Received an ACK of packet 6!!!  
A: Moved base to 7!!!

EVENT time: 5057.222205267495 type: 1 entity: 0  
A: Sended packet 7!!!

EVENT time: 5063.118961149938 type: 2 entity: 1  
B: Correct packet 7, deliver it to upper layer!!!  
B: Sended ACK for packet 7!!!  
B: Now expecting packet 0!!!

EVENT time: 5067.174352244637 type: 2 entity: 0  
A: Received an ACK of packet 7!!!  
A: Moved base to 8!!!

EVENT time: 5344.3769646290475 type: 1 entity: 0  
A: SeqNo reached the limit. Wraparound!!!  
A: Sended packet 0!!!



EVENT time: 5346.410534989471 type: 2 entity: 1  
B: Correct packet 0, deliver it to upper layer!!!  
B: Sended ACK for packet 0!!!  
B: Now expecting packet 1!!!

EVENT time: 5352.967864009522 type: 2 entity: 0  
A: Received an ACK of packet 0!!!  
A: Moved base to 1!!!

EVENT time: 5403.289895321513 type: 1 entity: 0  
A: Sended packet 1!!!

EVENT time: 5406.946470534379 type: 2 entity: 1  
B: Correct packet 1, deliver it to upper layer!!!  
B: Sended ACK for packet 1!!!  
B: Now expecting packet 2!!!

EVENT time: 5414.9801324503305 type: 2 entity: 0  
A: Received an ACK of packet 1!!!  
A: Moved base to 2!!!

EVENT time: 5753.569139683218 type: 1 entity: 0  
A: Sended packet 2!!!

EVENT time: 5758.588335825679 type: 2 entity: 1  
B: Correct packet 2, deliver it to upper layer!!!  
B: Sended ACK for packet 2!!!  
B: Now expecting packet 3!!!

EVENT time: 5766.269051179541 type: 2 entity: 0  
A: Received an ACK of packet 2!!!  
A: Moved base to 3!!!

EVENT time: 6147.038178655354 type: 1 entity: 0  
A: Sended packet 3!!!

EVENT time: 6149.423871578112 type: 2 entity: 1  
B: Correct packet 3, deliver it to upper layer!!!  
B: Sended ACK for packet 3!!!  
B: Now expecting packet 4!!!

EVENT time: 6152.764030884731 type: 2 entity: 0  
A: Received an ACK of packet 3!!!  
A: Moved base to 4!!!

EVENT time: 6317.538987395856 type: 1 entity: 0  
A: Sended packet 4!!!

EVENT time: 6321.804773094882 type: 2 entity: 1

B: Correct packet 4, deliver it to upper layer!!!  
B: Sended ACK for packet 4!!!  
B: Now expecting packet 5!!!

EVENT time: 6331.166173284097 type: 2 entity: 0  
A: Received an ACK of packet 4!!!  
A: Moved base to 5!!!

EVENT time: 6491.604358043153 type: 1 entity: 0  
A: Sended packet 5!!!

EVENT time: 6494.071352275155 type: 2 entity: 1  
B: Correct packet 5, deliver it to upper layer!!!  
B: Sended ACK for packet 5!!!  
B: Now expecting packet 6!!!

EVENT time: 6503.3322244941555 type: 2 entity: 0  
A: Received an ACK of packet 5!!!  
A: Moved base to 6!!!

EVENT time: 6730.588702047792 type: 1 entity: 0  
Simulator terminated at time 6730.588702047792

=====STATISTICS=====

Number of original packets transmitted by A: 30  
Number of retransmissions by A: 0  
Number of data packets delivered to layer 5 at B: 30  
Number of ACK packets sent by B: 30  
Number of corrupted packets: 0  
Ratio of lost packets: 0.0  
Ratio of corrupted packets: 0.0  
Average RTT: 10.2575304422131  
Average communication time: 10.2575304422131

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