---- Stop and Wait Network Simulator Version 1.1 ------

Enter the number of messages to simulate: 11

Enter packet loss probability [enter 0.0 for no loss]:0.1

Enter packet corruption probability [0.0 for no corruption]:0.3

Enter average time between messages from sender's layer5 [> 0.0]:1000

Enter TRACE:2

EVENT time: 696.571045, type: 1, fromlayer5 entity: 0

packet sent from A with message aaaaaaaaaaaaaaaaaaaa and seq number 0

checksum A is 940

EVENT time: 701.979919, type: 2, fromlayer3 entity: 1

received packet from A with message aaaaaaaaaaaaaaaaaaa

at B, packet with message aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa and sequence number 0 sent to layer 5 i.e.

application layer

ack sent from B with acknum 0

TOLAYER3: packet being corrupted

EVENT time: 706.738098, type: 2, fromlayer3 entity: 0

corrupt packet detected at A

EVENT time: 716.571045, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message aaaaaaaaaaaaaaaaaaaa and seq number 0

EVENT time: 726.099182, type: 2, fromlayer3 entity: 1

received packet from A with message aaaaaaaaaaaaaaaaaaa

nack sent from B with nacknum 0

EVENT time: 735.802429, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 0

EVENT time: 1966.186157, type: 1, fromlayer5 entity: 0

checksum A is 961

EVENT time: 1975.974609, type: 2, fromlayer3 entity: 1

application layer

ack sent from B with acknum 1

TOLAYER3: packet being lost

EVENT time: 1986.186157, type: 0, timerinterrupt entity: 0

timeout happened at A

EVENT time: 1993.139526, type: 2, fromlayer3 entity: 1

nack sent from B with nacknum 1

EVENT time: 1994.153198, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 1

EVENT time: 3866.870605, type: 1, fromlayer5 entity: 0

packet sent from A with message cccccccccccccc and seq number 0

checksum A is 980

at B, packet with message ccccccccccccccc and sequence number 0 sent to layer 5 i.e.

application layer

ack sent from B with acknum 0

EVENT time: 3877.538330, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 0

EVENT time: 5315.140625, type: 1, fromlayer5 entity: 0

packet sent from A with message ddddddddddddddddddd and seg number 1

checksum A is 1001

TOLAYER3: packet being corrupted

EVENT time: 5325.117676, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 5335.140625, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message ddddddddddddddddddd and seg number 1

EVENT time: 5343.607910, type: 2, fromlayer3 entity: 1

received packet from A with message ddddddddddddddddddddd

at B, packet with message dddddddddddddddddddddddd and sequence number 1 sent to layer 5 i.e.

application layer

ack sent from B with acknum 1

EVENT time: 5346.891113, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 1

EVENT time: 6415.539551, type: 1, fromlayer5 entity: 0

packet sent from A with message eeeeeeeeeeeeeeee and seq number 0

checksum A is 1020

EVENT time: 6418.807129, type: 2, fromlayer3 entity: 1 received packet from A with message eeeeeeeeeeeeee

at B, packet with message eeeeeeeeeeeeeeeeee and sequence number 0 sent to layer 5 i.e.

application layer

ack sent from B with acknum 0

EVENT time: 6420.166992, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 0

EVENT time: 7857.338379, type: 1, fromlayer5 entity: 0

packet sent from A with message fffffffffffffffffffffff and seq number 1

checksum A is 1041

TOLAYER3: packet being corrupted

EVENT time: 7866.266602, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 7877.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message fffffffffffffffff and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 7883.631836, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 7897.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message fffffffffffffffffffff and seq number 1

application layer

ack sent from B with acknum 1
TOLAYER3: packet being lost

EVENT time: 7917.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message ffffffffffffffffffffffff and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 7919.102051, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 7937.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message ffffffffffffffffff and seq number 1

nack sent from B with nacknum 1

TOLAYER3: packet being corrupted

EVENT time: 7947.611816, type: 2, fromlayer3 entity: 0

corrupt packet detected at A

EVENT time: 7957.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message fffffffffffffffff and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 7961.372559, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 7977.338379, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message fffffffffffffffff and seq number 1

nack sent from B with nacknum 1

EVENT time: 7987.032715, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 1

EVENT time: 8657.208008, type: 1, fromlayer5 entity: 0

checksum A is 1060

application layer

ack sent from B with acknum 0

EVENT time: 8665.754883, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 0

EVENT time: 9304.435547, type: 1, fromlayer5 entity: 0

checksum A is 1081

TOLAYER3: packet being corrupted

EVENT time: 9307.648438, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 9324.435547, type: 0, timerinterrupt entity: 0

timeout happened at A

EVENT time: 9334.137695, type: 2, fromlayer3 entity: 1

application layer

ack sent from B with acknum 1

EVENT time: 9335.430664, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 1

EVENT time: 10792.130859, type: 1, fromlayer5 entity: 0 packet sent from A with message iiiiiiiiiiiiiiiiii and seq number 0

checksum A is 1100

EVENT time: 10797.085938, type: 2, fromlayer3 entity: 1

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ack sent from B with acknum 0

EVENT time: 10801.306641, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 0

EVENT time: 12619.506836, type: 1, fromlayer5 entity: 0

packet sent from A with message jjjjjjjjjjjjjjj and seq number 1

checksum A is 1121

TOLAYER3: packet being corrupted

EVENT time: 12626.310547, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 12639.506836, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message jjjjjjjjjjjjjjj and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 12647.161133, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 12659.506836, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message jjjjjjjjjjjjjjj and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 12660.552734, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 12679.506836, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message jijjjjjjjjjjjjjj and seq number 1

EVENT time: 12683.768555, type: 2, fromlayer3 entity: 1

received packet from A with message jjjjjjjjjjjjjjjjjj

at B, packet with message jjjjjjjjjjjjjjjj and sequence number 1 sent to layer 5 i.e. application

layer

ack sent from B with acknum ${\bf 1}$

TOLAYER3: packet being lost

EVENT time: 12699.506836, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message jjjjjjjjjjjjjjj and seq number 1

TOLAYER3: packet being corrupted

EVENT time: 12708.352539, type: 2, fromlayer3 entity: 1

corrupt packet detected at B

EVENT time: 12719.506836, type: 0, timerinterrupt entity: 0

timeout happened at A

packet sent from A with message jijjjjjjjjjjjjj and seq number 1

EVENT time: 12725.637695, type: 2, fromlayer3 entity: 1

received packet from A with message jjjjjjjjjjjjjjjj

nack sent from B with nacknum 1

EVENT time: 12732.161133, type: 2, fromlayer3 entity: 0 correctly received acknowledgment from B with acknum 1

EVENT time: 12790.605469, type: 1, fromlayer5 entity: 0

packet sent from A with message kkkkkkkkkkkkkkkkkkkkkkkk and seq number 0

checksum A is 1140

EVENT time: 12793.216797, type: 2, fromlayer3 entity: 1

Simulator terminated at time 12793.216797

after sending 11 msgs from layer5

Simulation Results:

Protocol: Alternating Bit Protocol

11 of packets sent from the Application Layer of Sender A

26 of packets sent from the Transport Layer of Sender A

25 packets received at the Transport layer

10 packets received at the Application layer

Total time: 12793.216797 time units

Throughput = 0.000782 packets/time units