```
---- Stop and Wait Network Simulator Version 1.1 ------
Enter the number of messages to simulate: 10
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
Initializing *A*
Initializing *B*
EVENT time: 93.569748, type: 1, fromlayer5 entity: 0
******Data aaaaaaaaaaaaaaaaaaaa waiting to to be sent****
----A side----
Seq_numb--->0
Ack_numb--->-1
Checksum--->1842
Data--->aaaaaaaaaaaaaaaaa
EVENT time: 99.062195, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->0
Ack_numb--->-1
Data--->aaaaaaaaaaaaaaaaa
packet.Checksum--->1842
B_side.Checksum--->1842
1. Packet 0 received at B successfully!!
2. Acknowledgement Packet 0 sent at A!!
```

EVENT time: 101.561325, type: 2, fromlayer3 entity: 0

### 3. Acknowledgement Packet 0 received at A successfully!!

EVENT time: 1607.715088, type: 1, fromlayer5 entity: 0

----A side----

Seq\_numb--->1

Ack\_numb--->-1

Checksum--->1862

EVENT time: 1609.116333, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack numb--->-1

packet.Checksum--->1862

B\_side.Checksum--->1862

1. Packet 1 received at B successfully!!

# 2. Acknowledgement Packet 1 sent at A!!

EVENT time: 1614.552979, type: 2, fromlayer3 entity: 0

## 3. Acknowledgement Packet 1 received at A successfully!!

EVENT time: 2322.031250, type: 1, fromlayer5 entity: 0

----A side----

Seq\_numb--->0

Ack\_numb--->-1

Checksum--->1880

#### Data--->cccccccccccccccc

EVENT time: 2325.527344, type: 2, fromlayer3 entity: 1

```
----B side----
Seq_numb--->0
Ack_numb--->-1
Data--->cccccccccccccccc
packet.Checksum--->1880
B_side.Checksum--->1880
1. Packet 0 received at B successfully!!
2. Acknowledgement Packet 0 sent at A!!
EVENT time: 2328.412354, type: 2, fromlayer3 entity: 0
3. Acknowledgement Packet 0 received at A successfully!!
EVENT time: 3332.804199, type: 1, fromlayer5 entity: 0
******Data dddddddddddddddd waiting to to be sent****
----A side----
Seq_numb--->1
Ack numb--->-1
Checksum--->1900
Data--->ddddddddddddddddd
     TOLAYER3: packet being corrupted
EVENT time: 3337.380615, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->1
Ack_numb--->-1
Data--->Zddddddddddddddddd
packet.Checksum--->1900
B_side.Checksum--->1890
Sending Negative Acknowledgement Packet(NACK) to *A* as Corrupted Packet was received!!!
```

EVENT time: 3341.256836, type: 2, fromlayer3 entity: 0

Negative Acknowledgement Packet Received!!

## Will retransmit in the TIMER\_INTERRUPT method after timeout.....

EVENT time: 3347.804199, type: 0, timerinterrupt entity: 0

### Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 3353.365479, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack\_numb--->-1

Data--->ddddddddddddddddd

packet.Checksum--->1900

B\_side.Checksum--->1900

1. Packet 1 received at B successfully!!

### 2. Acknowledgement Packet 1 sent at A!!

TOLAYER3: packet being lost

EVENT time: 3362.804199, type: 0, timerinterrupt entity: 0

## Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 3368.751709, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack numb--->-1

Data--->ddddddddddddddddd

packet.Checksum--->1900

B\_side.Checksum--->1900

#### 1. Packet 1 received at B successfully!!

## 2. Acknowledgement Packet 1 sent at A!!

EVENT time: 3370.949463, type: 2, fromlayer3 entity: 0

### 3. Acknowledgement Packet 1 received at A successfully!!

EVENT time: 5057.893555, type: 1, fromlayer5 entity: 0

----A side----

Seq\_numb--->0

Ack\_numb--->-1

Checksum--->1918

Data--->eeeeeeeeeeeeeeee

TOLAYER3: packet being corrupted

EVENT time: 5058.931152, type: 1, fromlayer5 entity: 0

EVENT time: 5062.472656, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->0

Ack numb--->-1

Data--->Zeeeeeeeeeeeeee

packet.Checksum--->1918

B\_side.Checksum--->1907

Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

EVENT time: 5064.000000, type: 2, fromlayer3 entity: 0

Negative Acknowledgement Packet Received!!

Will retransmit in the TIMER\_INTERRUPT method after timeout.....

EVENT time: 5072.893555, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 5074.813477, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->0

Ack numb--->-1

Data--->eeeeeeeeeeeeeee

```
packet.Checksum--->1918
B_side.Checksum--->1918
1. Packet 0 received at B successfully!!
2. Acknowledgement Packet 0 sent at A!!
TOLAYER3: packet being corrupted
EVENT time: 5084.448242, type: 2, fromlayer3 entity: 0
Corrupted Acknowledgement Packet received!!
Will retransmit in the TIMER_INTERRUPT method after timeout.....
EVENT time: 5087.893555, type: 0, timerinterrupt entity: 0
Time is up....Retransmitting packet in INTERRUPT method!!
EVENT time: 5093.975098, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->0
Ack_numb--->-1
Data--->eeeeeeeeeeeeeeee
packet.Checksum--->1918
B_side.Checksum--->1918
1. Packet 0 received at B successfully!!
2. Acknowledgement Packet 0 sent at A!!
EVENT time: 5098.526855, type: 2, fromlayer3 entity: 0
3. Acknowledgement Packet 0 received at A successfully!!
EVENT time: 6557.268066, type: 1, fromlayer5 entity: 0
----A side----
Seq_numb--->1
Ack_numb--->-1
Checksum--->1957
```

Data--->gggggggggggggggggg

#### TOLAYER3: packet being corrupted

EVENT time: 6564.979980, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack\_numb--->-1

Data--->Zggggggggggggggggg

packet.Checksum--->1957

B side.Checksum--->1944

## Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

EVENT time: 6570.675781, type: 2, fromlayer3 entity: 0

Negative Acknowledgement Packet Received!!

Will retransmit in the TIMER\_INTERRUPT method after timeout.....

EVENT time: 6572.268066, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

TOLAYER3: packet being corrupted

EVENT time: 6580.121582, type: 2, fromlayer3 entity: 1

----B side----

Seq numb--->1

Ack\_numb--->-1

Data--->Zggggggggggggggggg

packet.Checksum--->1957

B\_side.Checksum--->1944

Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

EVENT time: 6587.268066, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

TOLAYER3: packet being corrupted

EVENT time: 6587.982422, type: 2, fromlayer3 entity: 0

Negative Acknowledgement Packet Received!!

Will retransmit in the TIMER\_INTERRUPT method after timeout....

EVENT time: 6589.269043, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack\_numb--->-1

Data--->Zggggggggggggggggg

packet.Checksum--->1957

B\_side.Checksum--->1944

Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

EVENT time: 6590.429688, type: 2, fromlayer3 entity: 0

Negative Acknowledgement Packet Received!!

Will retransmit in the TIMER\_INTERRUPT method after timeout....

EVENT time: 6602.268066, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

TOLAYER3: packet being corrupted

EVENT time: 6606.464355, type: 2, fromlayer3 entity: 1

----B side----

Seq numb--->1

Ack\_numb--->-1

Data--->Zggggggggggggggggg

packet.Checksum--->1957

B\_side.Checksum--->1944

Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

**TOLAYER3:** packet being lost

EVENT time: 6617.268066, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

```
EVENT time: 6618.811523, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->1
Ack numb--->-1
Data--->gggggggggggggggggg
packet.Checksum--->1957
B_side.Checksum--->1957
1. Packet 1 received at B successfully!!
2. Acknowledgement Packet 1 sent at A!!
EVENT time: 6622.600586, type: 2, fromlayer3 entity: 0
3. Acknowledgement Packet 1 received at A successfully!!
EVENT time: 6854.091309, type: 1, fromlayer5 entity: 0
*****Data hhhhhhhhhhhhhhhhhhh waiting to to be sent****
----A side----
Seq_numb--->0
Ack numb--->-1
Checksum--->1975
Data--->hhhhhhhhhhhhhhhhhhhh
     TOLAYER3: packet being corrupted
EVENT time: 6861.486328, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->0
Ack numb--->-1
Data--->Zhhhhhhhhhhhhhhhhhhhh
packet.Checksum--->1975
B_side.Checksum--->1961
Sending Negative Acknowledgement Packet(NACK) to *A* as Corrupted Packet was received!!!
```

TOLAYER3: packet being lost

```
EVENT time: 6869.091309, type: 0, timerinterrupt entity: 0
Time is up....Retransmitting packet in INTERRUPT method!!
EVENT time: 6873.773926, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->0
Ack numb--->-1
Data--->hhhhhhhhhhhhhhhhhhhhh
packet.Checksum--->1975
B_side.Checksum--->1975
1. Packet 0 received at B successfully!!
2. Acknowledgement Packet 0 sent at A!!
EVENT time: 6876.742676, type: 2, fromlayer3 entity: 0
3. Acknowledgement Packet 0 received at A successfully!!
EVENT time: 8567.888672, type: 1, fromlayer5 entity: 0
----A side----
Seq_numb--->1
Ack_numb--->-1
Checksum--->1995
TOLAYER3: packet being corrupted
EVENT time: 8575.871094, type: 2, fromlayer3 entity: 1
----B side----
Seq_numb--->999999
Ack_numb--->-1
packet.Checksum--->1995
```

#### B\_side.Checksum--->1001993

### Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

### TOLAYER3: packet being lost

EVENT time: 8582.888672, type: 0, timerinterrupt entity: 0

### Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 8588.627930, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->1

Ack\_numb--->-1

packet.Checksum--->1995

B\_side.Checksum--->1995

### 1. Packet 1 received at B successfully!!

2. Acknowledgement Packet 1 sent at A!!

TOLAYER3: packet being corrupted

EVENT time: 8594.997070, type: 2, fromlayer3 entity: 0

Corrupted Acknowledgement Packet received!!

#### Will retransmit in the TIMER\_INTERRUPT method after timeout....

EVENT time: 8597.888672, type: 0, timerinterrupt entity: 0

# Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 8603.325195, type: 2, fromlayer3 entity: 1

----B side----

Seq numb--->1

Ack numb--->-1

packet.Checksum--->1995

B\_side.Checksum--->1995

## 1. Packet 1 received at B successfully!!

#### 2. Acknowledgement Packet 1 sent at A!!

## TOLAYER3: packet being corrupted

EVENT time: 8604.351563, type: 2, fromlayer3 entity: 0

## Corrupted Acknowledgement Packet received!!

#### Will retransmit in the TIMER\_INTERRUPT method after timeout....

EVENT time: 8612.888672, type: 0, timerinterrupt entity: 0

### Time is up....Retransmitting packet in INTERRUPT method!!

#### TOLAYER3: packet being corrupted

EVENT time: 8621.395508, type: 2, fromlayer3 entity: 1

----B side----

Seq numb--->1

Ack\_numb--->-1

packet.Checksum--->1995

B side.Checksum--->1980

### Sending Negative Acknowledgement Packet(NACK) to \*A\* as Corrupted Packet was received!!!

EVENT time: 8622.738281, type: 2, fromlayer3 entity: 0

### 3. Acknowledgement Packet 1 received at A successfully!!

EVENT time: 9351.054688, type: 1, fromlayer5 entity: 0

\*\*\*\*\*\*Data jjjjjjjjjjjjjjj waiting to to be sent\*\*\*\*

----A side----

Seq numb--->0

Ack\_numb--->-1

Checksum--->2013

Data--->jjjjjjjjjjjjjjjjjj

EVENT time: 9352.104492, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->0

Ack\_numb--->-1

Data--->jjjjjjjjjjjjjjjjjjj

packet.Checksum--->2013

B\_side.Checksum--->2013

1. Packet 0 received at B successfully!!

2. Acknowledgement Packet 0 sent at A!!

TOLAYER3: packet being lost

EVENT time: 9366.054688, type: 0, timerinterrupt entity: 0

Time is up....Retransmitting packet in INTERRUPT method!!

EVENT time: 9370.139648, type: 2, fromlayer3 entity: 1

----B side----

Seq\_numb--->0

Ack\_numb--->-1

Data--->jjjjjjjjjjjjjjjjjjjjj

packet.Checksum--->2013

B\_side.Checksum--->2013

1. Packet 0 received at B successfully!!

2. Acknowledgement Packet 0 sent at A!!

EVENT time: 9371.151367, type: 2, fromlayer3 entity: 0

3. Acknowledgement Packet 0 received at A successfully!!

Simulator terminated at time 9371.151367

after sending 10 msgs from layer5

Process returned 0 (0x0) execution time: 20.362 s

Press any key to continue.