Input parameters:

Number of Messages = 30 Lost Packet Prob. = 0.200 Corrupt Packet Prob. = 0.200 Out Of Order Prob. = 0.000 Ave. time between messages = 10.00 Trace level = 2 Randomize = 1 Bi-directional = 0

```
A:
      9.7649, Layer 5 to 4 Message = !fEVhy->Pbs'2J3m~2DU
B:
     11.5597, Layer 4 to 5 Message = !fEVhy->Pbs'2J3m~2DU
A:
     28.9736, Layer 5 to 4 Message = ##i.Qt9]!Eh-Ps8[~Dg,
A:
     30.1281, Layer 5 to 4 Message = X$d:oFzQ(]3h>sJ~U,a
A:
     30.9022, Layer 5 to 4 Message = %kS%$jR:#iQ9!hP8~gO7
A:
     48.8237, Layer 5 to 4 Message = &\wg&e XRLF?93-'~xrl
A:
     68.0594, Layer 5 to 4 Message = '2=IT'kv$x:FQ]hs~,7C
A:
     72.8823, Layer 5 to 4 Message = (Eb \sim = Z(6SpxLi(Eb \sim = Zw))
A:
     81.6903, Layer 5 to 4 Message = dW(V'U\&)\%SR2Q!P\simON
A:
     94.9297, Layer 5 to 4 Message = *jL.nP2r*6vX:z]>~aC\%
A:
     98.3387, Layer 5 to 4 Message = +fpdWK>2&+k RF3-~rfY
    112.3550, Layer 5 to 4 Message = ,16;AFKPUZ,ejoty~&+0
A:
    125.3026, Layer 5 to 4 Message = -DZq*AWn'=T-$:Qh~7Ne
A:
A:
    131.3987, Layer 5 to 4 Message = .V\sim lq;d.V\sim lq.d.V\sim lq;
A:
    148.1414, Layer 5 to 4 Message = xiE~Z6pL(b=wSxiE~Z6p
A:
    166.2597, Layer 5 to 4 Message = d{iVD1|jWE2}2X03~IYG
A:
    171.5800, Layer 5 to 4 Message = 10x.-,+*)('&%$#1~}|{
A:
    189.0125, Layer 5 to 4 Message = 2CSdt'7HXiy,<M^n21BR
A:
    198.2173, Layer 5 to 4 Message = 3Uw;^!Df*Ln2Tv:]~3e)
A:
    202.8070, Layer 5 to 4 Message = 4f=qGzP&Yxc8lB3K~T4^
A:
    221.3070, Layer 5 to 4 Message = 5zbl0u]D+pW>&kR9~fM5
A:
    231.2292, Layer 5 to 4 Message = 6x(\sim wpibZSLE=6x(\sim wpi
A:
    234.2587, Layer 5 to 4 Message = d7LVaku!,6AK2`jt~+5?
A:
    250.0436, Layer 5 to 4 Message = 8T8.Jf$?[w5Qm+Gc~<Xt
A:
    267.4476, Layer 5 to 4 Message = 9g693a0^-Z*W'T$Q~N{K
A:
    275.5064, Layer 5 to 4 Message = :yZ;:[<{]=|^>} ?^A!
A:
    280.4640, Layer 5 to 4 Message = ;.~qd;l;.~qdVl;.~qdV
A:
    282.5445, Layer 5 to 4 Message = <AEIMQ<Y^bfinrvz~%)-
A:
    290.6355, Layer 5 to 4 Message = =fi\sim6Lb=xEZp(=3i\sim6Lb
A:
    294.5162, Layer 5 to 4 Message = dfxV}Gn7>(Ov2g0W~Ho8
A:
    298.1653, Layer 5 to 4 Message = ?xS.gBzU0?D|W2kF~Y4m
A:
    308.2941, Layer 5 to 4 Message = A-wdP<)s`LA%o[H4~kWD
A:
    323.5671, Layer 5 to 4 Message = B?=;97531x-B)'\%#~|zx
A:
    336.5630, Layer 5 to 4 Message = CRbg#2BQap!1CP`o~0?O
A:
    338.7457, Layer 5 to 4 Message = De(Ij-No2St7XD<^{R}Bc&
```

```
A: 342.5276, Layer 5 to 4 Message = EwL~S(Zxb6i=pEEL~S(Z
B: 20162.6390, Layer 4 to 5 Message = ##i.Qt9]!Eh-Ps8[~Dg,
B: 50165.3505, Layer 4 to 5 Message = X$d:oFzQ(]3h>sJ~U,a
B: 50177.6305, Layer 4 to 5 Message = %kS%$jR:#iQ9!hP8~gO7
B: 50204.1052, Layer 4 to 5 Message = &\wg&e XRLF?93-'~xrl
B: 50224.0093, Layer 4 to 5 Message = '2=IT'kv$x:FQ]hs~,7C
B: 80225.4990, Layer 4 to 5 Message = (Eb~=Z(6SpxLi(Eb~=Zw
B: 80254.5834, Layer 4 to 5 Message = dW(V'U&)%S$R2Q!P~O}N
B: 80272.9724, Layer 4 to 5 Message = *jL.nP2r*6vX:z]>~aC%
Printing the contents of the Simulation Event Q
Event Time = 80289.038 B: LAYER 3 Seg/Ack/Check = 9/0/1744647852:
+fpdWK>2&+k RF3-~rfY
Event Time = 80294.781 A: LAYER 3 Seq/Ack/Check = 7/1/-219940217:
dW(V'U\&)%S$R2Q!P~O\}N
Event Time = 80295.085 B: LAYER 3 Seg/Ack/Check = 11/0/-1472812792:
-DZg*AWn'=T-$:Qh~7Ne
Event Time = 80307.037 B: LAYER 3 Seg/Ack/Check = 12/0/-943157472: .V~lg;d.V~lg.d.V~lg;
Event Time = 80307.393 A: LAYER 3 Seq/Ack/Check = 8/1/1562278328:
*jL.nP2r*6vX:z]>~aC%
Event Time = 80314.505 B: LAYER 3 Seq/Ack/Check = 13/0/1457965295:
xiE~Z6pL(b=wSxiE~Z6p
Event Time = 80331.475 B: LAYER 3 Seg/Ack/Check = 14/0/-475201036:
d{iVD1|iWE2}2X03~IYG
Event Time = 80352.376 B: LAYER 3 Seq/Ack/Check = 15/0/-30270197: 10x.-,+*)('&%$#1~}{
Event Time = 80362.375 B: LAYER 3 Seg/Ack/Check = 16/0/1883857018:
2CSdt'7HXiy,<M^n21BR
Event Time = 80373.825 B: LAYER 3 Seq/Ack/Check = 17/0/-1807835223:
3Uw;^!Df*Ln2Tv:]~3e)
Event Time = 80392.435 B: LAYER 3 Seg/Ack/Check = 18/0/-414472489:
4f=qGzP&Yxc8lB3K~T4^
Event Time = 80423.429 B: LAYER 3 Seq/Ack/Check = 19/0/1103044692:
5zbl0u]D+pW>&kR9~fM5
Event Time = 80445.579 B: LAYER 3 Seg/Ack/Check = 20/0/2028775087:
6x(~wpibZSLE=6�(~wpi
Event Time = 80456.850 B: LAYER 3 Seq/Ack/Check = 21/0/-1263186528:
d7LVaku!,6AK2`it~+5?
Event Time = 80472.967 B: LAYER 3 Seg/Ack/Check = 22/0/-1470668016:
8T8.Jf$?[w5Qm+Gc~<Xt
Event Time = 80496.110 B: LAYER 3 Seq/Ack/Check = 24/0/740810096: :yZ;:[<{]=|^>}_?~`A!
Event Time = 80506.363 B: LAYER 3 Seg/Ack/Check = 25/0/-1475983375:
;.~qd;I;.~qdVI;.~qdV
```

```
Event Time = 80512.623 B: LAYER 3 Seg/Ack/Check = 26/0/1319987581:
<AEIMQ<Y^bfjnrvz~%)-
Event Time = 80514.791 B: LAYER 3 Seq/Ack/Check = 27/0/1854234234:
=fi\sim6Lb=xEZp(=3i\sim6Lb
Event Time = 80541.494 B: LAYER 3 Seg/Ack/Check = 29/0/-478830668:
?xS.gBzU0?DJW2kF~Y4m
Event Time = 80559.381 B: LAYER 3 Seq/Ack/Check = 33/0/-632244004:
De(Ij-No2St7XD<^~Bc&
Event Time = 80567.206 B: LAYER 3 Seg/Ack/Check = 34/0/1711130266:
EwL~S(Zxb6i=pEEL~S(Z
Event Time = 90142.976 A: Timer
Printing the contents of the Simulation Event Q
Event Time = 80294.781 A: LAYER 3 Seq/Ack/Check = 7/1/-219940217:
dW(V'U\&)\%S$R2Q!P~O\}N
Event Time = 80295.085 B: LAYER 3 Seq/Ack/Check = 11/0/-1472812792:
-DZq*AWn'=T-$:Qh~7Ne
Event Time = 80307.037 B: LAYER 3 Seg/Ack/Check = 12/0/-943157472: .V~lg;d.V~lg.d.V~lg;
Event Time = 80307.393 A: LAYER 3 Seg/Ack/Check = 8/1/1562278328:
*jL.nP2r*6vX:z]>~aC%
Event Time = 80314.505 B: LAYER 3 Seq/Ack/Check = 13/0/1457965295:
xiE~Z6pL(b=wSxiE~Z6p
Event Time = 80331.475 B: LAYER 3 Seg/Ack/Check = 14/0/-475201036:
d{iVD1|iWE2}2X03~IYG
Event Time = 80352.376 B: LAYER 3 Seg/Ack/Check = 15/0/-30270197: 10x.-,+*)('&%$#1~}{
Event Time = 80362.375 B: LAYER 3 Seg/Ack/Check = 16/0/1883857018:
2CSdt'7HXiy,<M^n21BR
Event Time = 80373.825 B: LAYER 3 Seq/Ack/Check = 17/0/-1807835223:
3Uw;^!Df*Ln2Tv:]~3e)
Event Time = 80392.435 B: LAYER 3 Seg/Ack/Check = 18/0/-414472489:
4f=qGzP&Yxc8lB3K~T4^
Event Time = 80423.429 B: LAYER 3 Seq/Ack/Check = 19/0/1103044692:
5zbl0u]D+pW>&kR9~fM5
Event Time = 80445.579 B: LAYER 3 Seq/Ack/Check = 20/0/2028775087:
6x(~wpibZSLE=6�(~wpi
Event Time = 80456.850 B: LAYER 3 Seq/Ack/Check = 21/0/-1263186528:
d7LVaku!,6AK2`jt~+5?
Event Time = 80472.967 B: LAYER 3 Seq/Ack/Check = 22/0/-1470668016:
8T8.Jf$?[w5Qm+Gc~<Xt
Event Time = 80496.110 B: LAYER 3 Seq/Ack/Check = 24/0/740810096: :yZ;:[<{]=|^>}_?~`A!
Event Time = 80506.363 B: LAYER 3 Seg/Ack/Check = 25/0/-1475983375:
;.\sim qd;I;.\sim qdVI;.\sim qdV
```

```
Event Time = 80512.623 B: LAYER 3 Seg/Ack/Check = 26/0/1319987581:
<AEIMQ<Y^bfjnrvz~%)-
Event Time = 80514.791 B: LAYER 3 Seq/Ack/Check = 27/0/1854234234:
=fi\sim6Lb=xEZp(=3i\sim6Lb
Event Time = 80541.494 B: LAYER 3 Seg/Ack/Check = 29/0/-478830668:
?xS.gBzU0?D|W2kF~Y4m
Event Time = 80559.381 B: LAYER 3 Seg/Ack/Check = 33/0/-632244004:
De(Ij-No2St7XD<^~Bc&
Event Time = 80567.206 B: LAYER 3 Seg/Ack/Check = 34/0/1711130266:
EwL~S(Zxb6i=pEEL~S(Z
Event Time = 90142.976 A: Timer
B: 80289.0384, Layer 4 to 5 Message = +fpdWK>2&+k_RF3-~rfY
B: 90266.8431, Layer 4 to 5 Message = ,16;AFKPUZ,ejoty~&+0
B: 90281.8293, Layer 4 to 5 Message = -DZg*AWn'=T-$:Qh~7Ne
B: 100323.6151, Layer 4 to 5 Message = .V\sim lg;d.V\sim lg.d.V\sim lg;
B: 100353.6777, Layer 4 to 5 Message = xiE~Z6pL(b=wSxiE~Z6p
B: 100376.2058, Layer 4 to 5 Message = d{iVD1|iWE2}2X03~IYG
B: 100403.6814, Layer 4 to 5 Message = 10x.-,+*)('&%$#1~}|{
B: 100424.5658, Layer 4 to 5 Message = 2CSdt'7HXiy,<M^n21BR
B: 110387.5401, Layer 4 to 5 Message = 3Uw;^!Df*Ln2Tv:]~3e)
B: 110418.5240, Layer 4 to 5 Message = 4f=qGzP&Yxc8lB3K~T4^
Printing the contents of the Simulation Event Q
Event Time = 110438.072 B: LAYER 3 Seq/Ack/Check = 19/0/1103044692:
5zbI0u1D+pW>&kR9~fM5
Event Time = 110444.718 B: LAYER 3 Seg/Ack/Check = 20/0/-538138961:
6x(~wpibZSLE=6x(~wpi
Event Time = 110469.667 B: LAYER 3 Seg/Ack/Check = 21/0/-1263186528:
d7LVaku!,6AK2`it~+5?
Event Time = 110483.587 B: LAYER 3 Seg/Ack/Check = 22/0/-1470668016:
8T8.Jf$?[w5Qm+Gc~<Xt
Event Time = 110503.310 B: LAYER 3 Seg/Ack/Check = 23/0/1694543215:
9g693a0^-Z*W'T$Q~N{K
Event Time = 110523.576 B: LAYER 3 Seq/Ack/Check = 24/0/740810096: :yZ;:[<{]=|^>}_?~`A!
Event Time = 110526.266 B: LAYER 3 Seg/Ack/Check = 771751961/0/-1475983375:
;.~qd;I;~qdVI;.~qdV
Event Time = 110543.532 B: LAYER 3 Seq/Ack/Check = 26/0/1319987581:
<AEIMQ<Y^bfinrvz~%)-
Event Time = 110547.707 B: LAYER 3 Seq/Ack/Check = 27/0/1854234234:
=fi\sim6Lb=xEZp(=3i\sim6Lb
Event Time = 110578.205 B: LAYER 3 Seg/Ack/Check = 29/0/-478830668:
?xS.gBzU0?D|W2kF~Y4m
```

Event Time = 110606.266 B: LAYER 3 Seg/Ack/Check = 30/0/-1275239491:

A-wdP<)s`LA%o[H4~kWD

Event Time = 110635.545 B: LAYER 3 Seq/Ack/Check = 31/0/1941334950:

B?=;97531x-B)'%#~|zx

Event Time = 110664.985 B: LAYER 3 Seq/Ack/Check = 33/0/-632244004:

De(Ij-No2St7XD<^~Bc&

Event Time = 110670.366 B: LAYER 3 Seq/Ack/Check = 34/7864320/1711130266:

EwL~S(Zb6i=pEEL~S(Z

Event Time = 120142.976 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 110444.718 B: LAYER 3 Seq/Ack/Check = 20/0/-538138961:

6x(~wpibZSLE=6x(~wpi

Event Time = 110469.667 B: LAYER 3 Seq/Ack/Check = 21/0/-1263186528:

d7LVaku!,6AK2`jt~+5?

Event Time = 110483.587 B: LAYER 3 Seq/Ack/Check = 22/0/-1470668016:

8T8.Jf\$?[w5Qm+Gc~<Xt

Event Time = 110503.310 B: LAYER 3 Seg/Ack/Check = 23/0/1694543215:

9g693a0^-Z*W'T\$Q~N{K

Event Time = 110523.576 B: LAYER 3 Seq/Ack/Check = 24/0/740810096: :yZ;:[<{]=|^>}_?~`A!

Event Time = 110526.266 B: LAYER 3 Seg/Ack/Check = 771751961/0/-1475983375:

;.~qd;I;~qdVI;.~qdV

Event Time = 110543.532 B: LAYER 3 Seq/Ack/Check = 26/0/1319987581:

<AEIMQ<Y^bfinrvz~%)-

Event Time = 110547.707 B: LAYER 3 Seg/Ack/Check = 27/0/1854234234:

=fi \sim 6Lb=xEZp(=3i \sim 6Lb

Event Time = 110578.205 B: LAYER 3 Seq/Ack/Check = 29/0/-478830668:

?xS.gBzU0?D|W2kF~Y4m

Event Time = 110606.266 B: LAYER 3 Seg/Ack/Check = 30/0/-1275239491:

A-wdP<)s`LA%o[H4~kWD

Event Time = 110635.545 B: LAYER 3 Seq/Ack/Check = 31/0/1941334950:

B?=;97531x-B)'%#~|zx

Event Time = 110664.985 B: LAYER 3 Seg/Ack/Check = 33/0/-632244004:

De(Ij-No2St7XD<^~Bc&

Event Time = 110670.366 B: LAYER 3 Seg/Ack/Check = 34/7864320/1711130266:

EwL~S(Zb6i=pEEL~S(Z

Event Time = 120142.976 A: Timer

B: 110438.0725, Layer 4 to 5 Message = 5zbl0u]D+pW>&kR9~fM5

B: 110444.7183, Layer 4 to 5 Message = 6x(~wpibZSLE=6x(~wpi

B: 110469.6668, Layer 4 to 5 Message = d7LVaku!,6AK2`jt~+5?

B: 110483.5870, Layer 4 to 5 Message = 8T8.Jf\$?[w5Qm+Gc~<Xt

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B: 110503.3105, Layer 4 to 5 Message = 9g693a0^-Z*W'T$Q~N{K
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B:
$$110523.5756$$
, Layer 4 to 5 Message = $:yZ::[<{]=|^>} ?~`A!$

Printing the contents of the Simulation Event Q

Event Time = 130578.251 B: LAYER 3 Seg/Ack/Check = 30/0/-1275239491:

A-wdPW)s`LA%o[H4~k<D

Event Time = 130592.845 A: LAYER 3 Seq/Ack/Check = 28/1/-432311097:

dfxV}Gn7>(Ov2g0W~Ho8

Event Time = 130604.110 B: LAYER 3 Seq/Ack/Check = 31/0/1941334950:

B?=;97531x-B)'%#~|zx

Event Time = 130618.300 B: LAYER 3 Seq/Ack/Check = 32/0/-694169596:

CRbg#2BQap!1CP`o~0?O

Event Time = 130621.037 B: LAYER 3 Seq/Ack/Check = 33/2621440/-632244004:

Delj-No2St7XD<^~Bc&

Event Time = 140142.976 A: Timer

B: 130575.4352, Layer 4 to 5 Message = ?xS.gBzU0?D|W2kF~Y4m

Simulator terminated at time 130578.250777 after receiving 30 msgs at layer5 Simulator Analysis:

Number of messages sent from 5 to 4: 34

Number of messages received at Layer 5, side A: 0

Number of messages received at Layer 5, side B: 30

Number of messages incorrectly received at layer 5: 0

Number of packets entering the network: 740

Average number of packets already in network: 8.184

Number of packets that the network lost: 154

Number of packets that the network corrupted: 98

Number of packets that the network put out of order: 0