1. No packet loss, corruption, or out-of-order packets

     Number of Messages: 100

     Lost Packet Prob.: 0.0

     Corrupt Packet Prob.: 0.0

     Out Of Order Prob.: 0.0

     Ave. time between messages: 1000

     Trace level: 1

     Randomize: 1

     Bi-directional: 0

```
A:    793.5638,  Layer 5 to 4  Message = !fEVhy->Pbs'2J3m~2DU

B:    821.1119,  Layer 4 to 5  Message = !fEVhy->Pbs'2J3m~2DU

A:   2221.0286,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:   2229.7499,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:   3068.4006,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

B:   3091.3865,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

A:   3400.9068,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

B:   3415.5586,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

A:   3736.9506,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

B:   3752.5373,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

A:   4857.2971,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

B:   4879.4977,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

A:   5466.2742,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:   5492.8786,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:   5853.7796,  Layer 5 to 4  Message = dW(V'U&)%S$R2Q!P~O}N

B:   5864.1537,  Layer 4 to 5  Message = dW(V'U&)%S$R2Q!P~O}N

A:   6071.5391,  Layer 5 to 4  Message = *jL.nP2r*6vX:z]>~aC%

B:   6089.3814,  Layer 4 to 5  Message = *jL.nP2r*6vX:z]>~aC%

A:   6779.7636,  Layer 5 to 4  Message = +fpdWK>2&+k_RF3-~rfY

B:   6788.8617,  Layer 4 to 5  Message = +fpdWK>2&+k_RF3-~rfY

A:   8473.5228,  Layer 5 to 4  Message = ,16;AFKPUZ,ejoty~&+0

B:   8484.9123,  Layer 4 to 5  Message = ,16;AFKPUZ,ejoty~&+0

A:   8761.1786,  Layer 5 to 4  Message = -DZq*AWn'=T-$:Qh~7Ne

B:   8782.2198,  Layer 4 to 5  Message = -DZq*AWn'=T-$:Qh~7Ne
```

```
A:     9509.2196,   Layer 5 to 4   Message = .V~Iq;d.V~Iq.d.V~Iq;

B:     9514.8204,   Layer 4 to    Message = .V~Iq;d.V~Iq.d.V~Iq;

A:    10790.0257,   Layer 5 to 4   Message = xiE~Z6pL(b=wSxiE~Z6p

A:    10800.6499,   Layer 5 to 4   Message = d{iVD1|jWE2}2X03~lYG

B:    10801.9876,   Layer 4 to 5   Message = xiE~Z6pL(b=wSxiE~Z6p

B:    10847.3464,   Layer 4 to 5   Message = d{iVD1|jWE2}2X03~lYG

A:    10873.2590,   Layer 5 to 4   Message = 10x.-,+*)('&%$#1~}|{

B:    10888.3251,   Layer 4 to 5   Message = 10x.-,+*)('&%$#1~}|{

A:    11470.4823,   Layer 5 to 4   Message = 2CSdt'7HXiy,<M^n21BR

B:    11489.4166,   Layer 4 to 5   Message = 2CSdt'7HXiy,<M^n21BR

A:    12065.8108,   Layer 5 to 4   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:    12082.7858,   Layer 4 to 5   Message = 3Uw;^!Df*Ln2Tv:]~3e)

A:    13626.3889,   Layer 5 to 4   Message = 4f=qGzP&Yxc8lB3K~T4^

B:    13627.6010,   Layer 4 to 5   Message = 4f=qGzP&Yxc8lB3K~T4^

A:    13698.3723,   Layer 5 to 4   Message = 5zbI0u]D+pW>&kR9~fM5

B:    13710.6526,   Layer 4 to 5   Message = 5zbI0u]D+pW>&kR9~fM5

A:    13779.8970,   Layer 5 to 4   Message = 6x(~wpibZSLE=6x(~wpi

B:    13797.8226,   Layer 4 to 5   Message = 6x(~wpibZSLE=6x(~wpi

A:    15176.4152,   Layer 5 to 4   Message = d7LVaku!,6AK2`jt~+5?

B:    15197.9022,   Layer 4 to 5   Message = d7LVaku!,6AK2`jt~+5?

A:    15977.3013,   Layer 5 to 4   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

B:    15998.9908,   Layer 4 to 5   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

A:    16239.7760,   Layer 5 to 4   Message = 9g693a0^-Z*W'T$Q~N{K

B:    16269.4380,   Layer 4 to 5   Message = 9g693a0^-Z*W'T$Q~N{K

A:    17414.5389,   Layer 5 to 4   Message = :yZ;:[<{]=|^>}_?~`A!

B:    17437.0146,   Layer 4 to 5   Message = :yZ;:[<{]=|^>}_?~`A!

A:    17700.9619,   Layer 5 to 4   Message = ;.~qd;I;.~qdVI;.~qdV

B:    17722.4318,   Layer 4 to 5   Message = ;.~qd;I;.~qdVI;.~qdV

A:    17750.4186,   Layer 5 to 4   Message = <AEIMQ<Y^bfjnrvz~%)-

B:    17781.0775,   Layer 4 to 5   Message = <AEIMQ<Y^bfjnrvz~%)-

A:    19222.5622,   Layer 5 to 4   Message = =fi~6Lb=xEZp(=3i~6Lb

B:    19229.6853,   Layer 4 to 5   Message = =fi~6Lb=xEZp(=3i~6Lb

A:    19795.7096,   Layer 5 to 4   Message = dfxV}Gn7>(Ov2g0W~Ho8

B:    19811.3516,   Layer 4 to 5   Message = dfxV}Gn7>(Ov2g0W~Ho8

A:    20493.3007,   Layer 5 to 4   Message = ?xS.gBzU0?D|W2kF~Y4m

B:    20520.5731,   Layer 4 to 5   Message = ?xS.gBzU0?D|W2kF~Y4m
```

```
A:    22088.6131,   Layer 5 to 4   Message = A-wdP<)s`LA%o[H4~kWD

B:    22096.0432,   Layer 4 to 5   Message = A-wdP<)s`LA%o[H4~kWD

A:    23510.4507,   Layer 5 to 4   Message = B?=;97531x-B)'%#~|zx

B:    23524.9515,   Layer 4 to 5   Message = B?=;97531x-B)'%#~|zx
```

```
Printing the contents of the Simulation Event Q

Event Time = 23610.451 A: Timer

Event Time = 24508.496 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q
```

```
A:    24508.4956,   Layer 5 to 4   Message = CRbq#2BQap!1CP`o~0?O
```

```
Printing the contents of the Simulation Event Q

Event Time = 24608.496 A: Timer

Event Time = 25096.630 A: LAYER 5
```

```
B:    24512.3749,   Layer 4 to 5   Message = CRbq#2BQap!1CP`o~0?O

A:    25096.6295,   Layer 5 to 4   Message = De(Ij-No2St7XD<^~Bc&

B:    25116.1320,   Layer 4 to 5   Message = De(Ij-No2St7XD<^~Bc&

A:    25392.6912,   Layer 5 to 4   Message = EwL~S(Zxb6i=pEEL~S(Z

B:    25396.8331,   Layer 4 to 5   Message = EwL~S(Zxb6i=pEEL~S(Z

A:    27362.2487,   Layer 5 to 4   Message = d,pV<#gM3w^D2nTF~eK1

B:    27384.0158,   Layer 4 to 5   Message = d,pV<#gM3w^D2nTF~eK1

A:    28543.8235,   Layer 5 to 4   Message = Gf6.&{skcZRJB93)Gvnf

B:    28562.2340,   Layer 4 to 5   Message = Gf6.&{skcZRJB93)Gvnf

A:    29883.5365,   Layer 5 to 4   Message = HQZdmv!+4=GPYclu~H3<

B:    29900.1098,   Layer 4 to 5   Message = HQZdmv!+4=GPYclu~H3<

A:    30187.9389,   Layer 5 to 4   Message = Id~;Vq.Id~;Vq.Id~;Iq

B:    30193.2245,   Layer 4 to 5   Message = Id~;Vq.Id~;Vq.Id~;Iq

A:    32155.5489,   Layer 5 to 4   Message = JvEq?l:g5b0]+W&R~MyJ

B:    32180.1480,   Layer 4 to 5   Message = JvEq?l:g5b0]+W&R~MyJ

A:    32877.4964,   Layer 5 to 4   Message = K+iI)gG'eE%cC#aA~_>|

B:    32895.3217,   Layer 4 to 5   Message = K+iI)gG'eE%cC#aA~_>|

A:    33015.2724,   Layer 5 to 4   Message = LLx~pbSE6(wiZL=x~pbS
```

```
B:   33037.9983,   Layer 4 to 5   Message = LLx~pbSE6(wiZL=x~pbS

A:   33681.9748,   Layer 5 to 4   Message = dPMVY]`cfilo2ux{~$'*

A:   33692.8493,   Layer 5 to 4   Message = NcwNCWl#7Lau,AUj~5J_

B:   33711.2191,   Layer 4 to 5   Message = dPMVY]`cfilo2ux{~$'*

B:   33732.5167,   Layer 4 to 5   Message = NcwNCWl#7Lau,AUj~5J_

A:   33859.4638,   Layer 5 to 4   Message = Ou=dORxAgxU{Dj2X~Gm5

B:   33880.8380,   Layer 4 to 5   Message = Ou=dORxAgxU{Dj2X~Gm5

A:   34632.0813,   Layer 5 to 4   Message = Pfb;sP'_8pJ$[53G~X2j

B:   34657.1120,   Layer 4 to 5   Message = Pfb;sP'_8pJ$[53G~X2j

A:   35138.3663,   Layer 5 to 4   Message = Q<(q]HQ|hS>*s_J5~jUA

B:   35157.2713,   Layer 4 to 5   Message = Q<(q]HQ|hS>*s_J5~jUA

A:   35663.6691,   Layer 5 to 4   Message = ROLIFC?R9630-*'$~{xu

B:   35666.1769,   Layer 4 to 5   Message = ROLIFC?R9630-*'$~{xu

A:   36848.5484,   Layer 5 to 4   Message = Sbp~x=LZSw(6ESbp~x=L

B:   36866.7128,   Layer 4 to 5   Message = Sbp~x=LZSw(6ESbp~x=L

A:   37651.8919,   Layer 5 to 4   Message = dt6Vv8Xx:Tz<2|>_~Aa#

B:   37672.1420,   Layer 4 to 5   Message = dt6Vv8Xx:Tz<2|>_~Aa#

A:   38826.0501,   Layer 5 to 4   Message = U)Z.`3e8j=UCtHyM~R&W

B:   38829.1017,   Layer 4 to 5   Message = U)Z.`3e8j=UCtHyM~R&W

A:   40006.8896,   Layer 5 to 4   Message = V;~dI.qV;~dV.qV;~dI.

B:   40036.4401,   Layer 4 to 5   Message = V;~dI.qV;~dV.qV;~dI.

A:   41114.7506,   Layer 5 to 4   Message = WNE;2)}tkbXOW<3*~ulc

B:   41128.6418,   Layer 4 to 5   Message = WNE;2)}tkbXOW<3*~ulc

A:   42060.1075,   Layer 5 to 4   Message = Xaiqy$,4<EMU^Xnv~)19

B:   42081.3422,   Layer 4 to 5   Message = Xaiqy$,4<EMU^Xnv~)19

A:   42384.8602,   Layer 5 to 4   Message = YfxIc|8Rl(B[u1Ye~:Tn

B:   42407.6386,   Layer 4 to 5   Message = YfxIc|8Rl(B[u1Ye~:Tn

A:   42546.0906,   Layer 5 to 4   Message = Z(S~LwEp=i6bxZ(Z~LwE

B:   42568.2816,   Layer 4 to 5   Message = Z(S~LwEp=i6bxZ(Z~LwE

A:   43369.5165,   Layer 5 to 4   Message = d:wV5rQ0mL+h2&cB[^<y

B:   43391.0033,   Layer 4 to 5   Message = d:wV5rQ0mL+h2&cB[^<y

A:   44884.4482,   Layer 5 to 4   Message = ]M=.|m^N>x}n_O?0~]`P

B:   44910.0052,   Layer 4 to 5   Message = ]M=.|m^N>x}n_O?0~]`P

A:   45047.6507,   Layer 5 to 4   Message = ^`bdfhjlnprtvxz|~#^'

B:   45067.4498,   Layer 4 to 5   Message = ^`bdfhjlnprtvxz|~#^'

A:   45811.5013,   Layer 5 to 4   Message = _r(;Ocv,?Sgz0DWk~4H_
```

```
B:    45832.3350,  Layer 4 to 5  Message = _r(;Ocv,?Sgz0DWk~4H_

A:    47345.1900,  Layer 5 to 4  Message = `'Lq8^%Jo6[#Hm4Y~Fk2

B:    47346.7234,  Layer 4 to 5  Message = `'Lq8^%Jo6[#Hm4Y~Fk2

A:    49211.8380,  Layer 5 to 4  Message = aapI!X1hAwP)`8oH~W0g

B:    49218.0576,  Layer 4 to 5  Message = aapI!X1hAwP)`8oH~W0g

A:    50457.4392,  Layer 5 to 4  Message = bLb~iS=(pZExwbL6~iS=

B:    50473.6515,  Layer 4 to 5  Message = bLb~iS=(pZExwbL6~iS=

A:    52094.6922,  Layer 5 to 4  Message = dfZcRNJFB=952-3%~zvr

B:    52122.7232,  Layer 4 to 5  Message = dfZcRNJFB=952-3%~zvr

A:    53577.6029,  Layer 5 to 4  Message = dq~.dIVdq~.;IVdq~.;I

B:    53585.3870,  Layer 4 to 5  Message = dq~.dIVdq~.;IVdq~.;I
```

Printing the contents of the Simulation Event Q

Event Time = 53677.603 A: Timer

Event Time = 54712.822 A: LAYER 5

Printing the contents of the Simulation Event Q

```
A:    54712.8215,  Layer 5 to 4  Message = e&Ed%ec$Cb#Ba!A`~?_}
```

Printing the contents of the Simulation Event Q

Event Time = 54812.822 A: Timer

Event Time = 56334.642 A: LAYER 5

```
B:    54728.8198,  Layer 4 to 5  Message = e&Ed%ec$Cb#Ba!A`~?_}

A:    56334.6422,  Layer 5 to 4  Message = f8i;l>fBrEuHxK{N~Q$T

B:    56364.1789,  Layer 4 to 5  Message = f8i;l>fBrEuHxK{N~Q$T

A:    57607.3800,  Layer 5 to 4  Message = gKxqU9{gD(jN2tX<~cG+

B:    57625.6914,  Layer 4 to 5  Message = gKxqU9{gD(jN2tX<~cG+

A:    59170.2998,  Layer 5 to 4  Message = h^SI>4*}hi_TJ?5+~tj`

B:    59189.6198,  Layer 4 to 5  Message = h^SI>4*}hi_TJ?5+~tj`

A:    60442.3256,  Layer 5 to 4  Message = ipw~(x6=EiSZbipw~(x6

B:    60466.7295,  Layer 4 to 5  Message = ipw~(x6=EiSZbipw~(x6

A:    61224.2544,  Layer 5 to 4  Message = d%=Vo*C[txja24Mf~9Rk

B:    61255.2431,  Layer 4 to 5  Message = d%=Vo*C[txja24Mf~9Rk
```

```
A:   62399.1334,   Layer 5 to 4   Message = k7b.X%OyFp<k3^*T~KuB

B:   62401.6105,   Layer 4 to 5   Message = k7b.X%OyFp<k3^*T~KuB

A:   64102.2562,   Layer 5 to 4   Message = lf(dB}[9uS1ml)3C~]:v

B:   64128.2332,   Layer 4 to 5   Message = lf(dB}[9uS1ml)3C~]:v

A:   64185.6001,   Layer 5 to 4   Message = m]L;+xhWG6&scmB1~n^M

B:   64192.8796,   Layer 4 to 5   Message = m]L;+xhWG6&scmB1~n^M

A:   65078.1355,   Layer 5 to 4   Message = nopqrstuvwxyz{n}~!#$

B:   65099.1900,   Layer 4 to 5   Message = nopqrstuvwxyz{n}~!#$

A:   66521.6601,   Layer 5 to 4   Message = o$6I[n#5HZm!4GYo~3FX

B:   66542.1008,   Layer 4 to 5   Message = o$6I[n#5HZm!4GYo~3FX

A:   67678.2254,   Layer 5 to 4   Message = p6Z~EixSw=b(Lp6ZpEix

B:   67701.7785,   Layer 4 to 5   Message = p6Z~EixSw=b(Lp6ZpEix

A:   69412.4267,   Layer 5 to 4   Message = dI~V.d;qI~V.2;qI~q.d

B:   69423.8613,   Layer 4 to 5   Message = dI~V.d;qI~V.2;qI~q.d

A:   71042.1737,   Layer 5 to 4   Message = r[E.u_H1xbK4{eN7~hr:

B:   71066.9065,   Layer 4 to 5   Message = r[E.u_H1xbK4{eN7~hr:

A:   72592.9669,   Layer 5 to 4   Message = snid_YTOJE?:50+&~yts

B:   72617.7278,   Layer 4 to 5   Message = snid_YTOJE?:50+&~yts

A:   73172.7283,   Layer 5 to 4   Message = t#x;HTamy(4AMYfr~-9F

B:   73175.0275,   Layer 4 to 5   Message = t#x;HTamy(4AMYfr~-9F

A:   74790.1107,   Layer 5 to 4   Message = uuSq1Om-Ki)Ge%3a~>]z

B:   74816.5131,   Layer 4 to 5   Message = uuSq1Om-Ki)Ge%3a~>]z

A:   76235.3170,   Layer 5 to 4   Message = vHvIxJyKzL{M|N}O~P!Q

B:   76256.4059,   Layer 4 to 5   Message = vHvIxJyKzL{M|N}O~P!Q

A:   76892.0103,   Layer 5 to 4   Message = wZ=wbE(iLxpS6wZ=~bE(

B:   76917.5308,   Layer 4 to 5   Message = wZ=wbE(iLxpS6wZ=~bE(

A:   76949.0369,   Layer 5 to 4   Message = dmbVx?4){peY2C7,~sh]

B:   76979.6992,   Layer 4 to 5   Message = dmbVx?4){peY2C7,~sh]

A:   77644.2803,   Layer 5 to 4   Message = y!(.4yAGMSY`flrx~'-3

B:   77656.1345,   Layer 4 to 5   Message = y!(.4yAGMSY`flrx~'-3

A:   78888.5797,   Layer 5 to 4   Message = z4Ld{5ze|6Nf}7Og~8Ph

B:   78897.6289,   Layer 4 to 5   Message = z4Ld{5ze|6Nf}7Og~8Ph

A:   80164.8437,   Layer 5 to 4   Message = {Gp;e0Y{NwCl7a,U~Js>

B:   80166.5800,   Layer 4 to 5   Message = {Gp;e0Y{NwCl7a,U~Js>

A:   81382.0691,   Layer 5 to 4   Message = |Y6qN+fC|Z7rO,gD~[8s

B:   81401.6441,   Layer 4 to 5   Message = |Y6qN+fC|Z7rO,gD~[8s
```

```
A:    82938.2332,  Layer 5 to 4  Message = }lZI7&raO},xgUD2~m[J

B:    82943.7478,  Layer 4 to 5  Message = }lZI7&raO},xgUD2~m[J

A:    83096.4769,  Layer 5 to 4  Message = ~fDUgx,=Oa~&7I3l}1CT

B:    83110.5281,  Layer 4 to 5  Message = ~fDUgx,=Oa~&7I3l}1CT

A:    84101.6989,  Layer 5 to 4  Message = !3EVhy->Pbs'2J[m~2DU

B:    84107.0249,  Layer 4 to 5  Message = !3EVhy->Pbs'2J[m~2DU

A:    84666.5858,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:    84696.8729,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:    86550.9220,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

B:    86552.6175,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

A:    86849.3821,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

B:    86874.1315,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

A:    87184.5364,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

B:    87191.6964,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

A:    88012.7591,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

B:    88042.8413,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

A:    88177.6869,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:    88192.6532,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw


Printing the contents of the Simulation Event Q
Event Time = 88277.687 A: Timer
Event Time = 88771.988 A: LAYER 5



Printing the contents of the Simulation Event Q


A:    88771.9883,  Layer 5 to 4  Message = dW(V'U&)%S$R2Q!P~O}N


Printing the contents of the Simulation Event Q
Event Time = 88871.988 A: Timer
Event Time = 88886.201 A: LAYER 5


B:    88777.1307,  Layer 4 to 5  Message = dW(V'U&)%S$R2Q!P~O}N

A:    88886.2007,  Layer 5 to 4  Message = *fL.nP2r*6vX:z3>~aC%

B:    88888.8777,  Layer 4 to 5  Message = *fL.nP2r*6vX:z3>~aC%
```

```
Simulator terminated at time 88895.154529

 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: 200

  Average number of packets already in network:     0.000

  Number of packets that the network lost: 0

  Number of packets that the network corrupted: 0

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

2. High packet loss, low corruption, and out-of-order probabilities

    Number of Messages: 100

    Lost Packet Prob.: 0.8

    Corrupt Packet Prob.: 0.2

    Out Of Order Prob.: 0.2

    Ave. time between messages: 1000

    Trace level: 1

    Randomize: 1

    Bi-directional: 0

```
A:      605.2532,   Layer 5 to 4   Message = !fEVhy->Pbs'2J3m~2DU

B:      811.4150,   Layer 4 to 5   Message = !fEVhy->Pbs'2J3m~2DU

A:     1096.2138,   Layer 5 to 4   Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:     1538.1719,   Layer 5 to 4   Message = $X$d:oFzQ(]3h>sJ~U,a

A:     2832.8141,   Layer 5 to 4   Message = %kS%$jR:#iQ9!hP8~gO7

B:     2969.6399,   Layer 4 to 5   Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:     4084.4627,   Layer 5 to 4   Message = &}wq&e_XRLF?93-'~xrl

A:     5427.7191,   Layer 5 to 4   Message = '2=IT'kv$x:FQ]hs~,7C

B:     6242.7893,   Layer 4 to 5   Message = $X$d:oFzQ(]3h>sJ~U,a

A:     6578.4408,   Layer 5 to 4   Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:     7971.8797,   Layer 4 to 5   Message = %kS%$jR:#iQ9!hP8~gO7

A:     8230.8316,   Layer 5 to 4   Message = dW(V'U&)%S$R2Q!P~O}N

A:    10094.0354,   Layer 5 to 4   Message = *jL.nP2r*6vX:z]>~aC%

A:    10277.6542,   Layer 5 to 4   Message = +fpdWK>2&+k_RF3-~rfY

B:    10605.6267,   Layer 4 to 5   Message = &}wq&e_XRLF?93-'~xrl

A:    10794.2964,   Layer 5 to 4   Message = ,16;AFKPUZ,ejoty~&+0

A:    11757.6765,   Layer 5 to 4   Message = -DZq*AWn'=T-$:Qh~7Ne

B:    12648.0828,   Layer 4 to 5   Message = '2=IT'kv$x:FQ]hs~,7C

A:    12661.5325,   Layer 5 to 4   Message = .V~Iq;d.V~Iq.d.V~Iq;

A:    13521.9269,   Layer 5 to 4   Message = xiE~Z6pL(b=wSxiE~Z6p

A:    15451.2582,   Layer 5 to 4   Message = d{iVD1|jWE2}2X03~lYG

A:    17375.2931,   Layer 5 to 4   Message = 10x.-,+*)('&%$#1~}|{

A:    17903.7283,   Layer 5 to 4   Message = 2CSdt'7HXiy,<M^n21BR

A:    19270.4933,   Layer 5 to 4   Message = 3Uw;^!Df*Ln2Tv:]~3e)
```

```
A:    20165.4039,   Layer 5 to 4   Message = 4f=qGzP&Yxc8lB3K~T4^

A:    20362.3998,   Layer 5 to 4   Message = 5zbI0u]D+pW>&kR9~fM5

B:    21332.7779,   Layer 4 to 5   Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:    21883.1113,   Layer 5 to 4   Message = 6x(~wpibZSLE=6x(~wpi

B:    22657.2868,   Layer 4 to 5   Message = dW(V'U&)%S$R2Q!P~O}N

A:    23440.0188,   Layer 5 to 4   Message = d7LVaku!,6AK2`jt~+5?

B:    23909.8546,   Layer 4 to 5   Message = *jL.nP2r*6vX:z]>~aC%

A:    24373.6110,   Layer 5 to 4   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

B:    25529.3150,   Layer 4 to 5   Message = +fpdWK>2&+k_RF3-~rfY

A:    25917.7545,   Layer 5 to 4   Message = 9g693a0^-Z*W'T$Q~N{K

B:    26660.1186,   Layer 4 to 5   Message = ,16;AFKPUZ,ejoty~&+0

A:    27826.5216,   Layer 5 to 4   Message = :yZ;:[<{]=|^>}_?~`A!

A:    28413.1660,   Layer 5 to 4   Message = ;.~qd;I;.~qdVI;.~qdV

A:    28809.4106,   Layer 5 to 4   Message = <AEIMQ<Y^bfjnrvz~%)-

A:    30286.2059,   Layer 5 to 4   Message = =fi~6Lb=xEZp(=3i~6Lb

A:    32057.9203,   Layer 5 to 4   Message = dfxV}Gn7>(Ov2g0W~Ho8

B:    32519.2728,   Layer 4 to 5   Message = -DZq*AWn'=T-$:Qh~7Ne

A:    33792.2138,   Layer 5 to 4   Message = ?xS.gBzU0?D|W2kF~Y4m

A:    34873.8213,   Layer 5 to 4   Message = A-wdP<)s`LA%o[H4~kWD

B:    34922.9769,   Layer 4 to 5   Message = .V~Iq;d.V~Iq.d.V~Iq;

A:    35132.7584,   Layer 5 to 4   Message = B?=;97531x-B)'%#~|zx

B:    36650.3220,   Layer 4 to 5   Message = xiE~Z6pL(b=wSxiE~Z6p

A:    37059.4744,   Layer 5 to 4   Message = CRbq#2BQap!1CP`o~0?O

A:    37201.3303,   Layer 5 to 4   Message = De(Ij-No2St7XD<^~Bc&

A:    38410.3162,   Layer 5 to 4   Message = EwL~S(Zxb6i=pEEL~S(Z

A:    39877.6363,   Layer 5 to 4   Message = d,pV<#gM3w^D2nTF~eK1

A:    41539.4164,   Layer 5 to 4   Message = Gf6.&{skcZRJB93)Gvnf

A:    42238.1280,   Layer 5 to 4   Message = HQZdmv!+4=GPYclu~H3<

A:    44217.6253,   Layer 5 to 4   Message = Id~;Vq.Id~;Vq.Id~;Iq

A:    44643.1608,   Layer 5 to 4   Message = JvEq?l:g5b0]+W&R~MyJ

A:    45061.1435,   Layer 5 to 4   Message = K+iI)gG'eE%cC#aA~_>|

B:    45279.1377,   Layer 4 to 5   Message = d{iVD1|jWE2}2X03~lYG

A:    45594.9376,   Layer 5 to 4   Message = LLx~pbSE6(wiZL=x~pbS

B:    46412.1968,   Layer 4 to 5   Message = 10x.-,+*)('&%$#1~}|{

A:    46957.3651,   Layer 5 to 4   Message = dPMVY]`cfilo2ux{~$'*

A:    48187.8333,   Layer 5 to 4   Message = NcwNCWl#7Lau,AUj~5J_
```

```
A:    48834.4758,   Layer 5 to 4   Message = Ou=dORxAgxU{Dj2X~Gm5

B:    49941.3732,   Layer 4 to 5   Message = 2CSdt'7HXiy,<M^n21BR

A:    50698.0514,   Layer 5 to 4   Message = Pfb;sP'_8pJ$[53G~X2j

B:    50783.6540,   Layer 4 to 5   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:    51510.3128,   Layer 4 to 5   Message = 4f=qGzP&Yxc8lB3K~T4^

B:    52430.5905,   Layer 4 to 5   Message = 5zbI0u]D+pW>&kR9~fM5

A:    52593.6852,   Layer 5 to 4   Message = Q<(q]HQ|hS>*s_J5~jUA

A:    53047.5221,   Layer 5 to 4   Message = ROLIFC?R9630-*'$~{xu

A:    54392.3771,   Layer 5 to 4   Message = Sbp~x=LZSw(6ESbp~x=L

B:    54755.6987,   Layer 4 to 5   Message = 6x(~wpibZSLE=6x(~wpi

A:    54893.7086,   Layer 5 to 4   Message = dt6Vv8Xx:Tz<2|>_~Aa#

A:    55751.4895,   Layer 5 to 4   Message = U)Z.`3e8j=UCtHyM~R&W

A:    57363.1255,   Layer 5 to 4   Message = V;~dI.qV;~dV.qV;~dI.

B:    57492.2574,   Layer 4 to 5   Message = d7LVaku!,6AK2`jt~+5?

A:    57993.0993,   Layer 5 to 4   Message = WNE;2)}tkbXOW<3*~ulc

A:    59987.1089,   Layer 5 to 4   Message = Xaiqy$,4<EMU^Xnv~)19

A:    60095.3630,   Layer 5 to 4   Message = YfxIc|8Rl(B[u1Ye~:Tn

A:    60604.0302,   Layer 5 to 4   Message = Z(S~LwEp=i6bxZ(Z~LwE

A:    62082.2372,   Layer 5 to 4   Message = d:wV5rQ0mL+h2&cB[^<y

A:    62675.2976,   Layer 5 to 4   Message = ]M=.|m^N>x}n_O?0~]`P

A:    62980.8829,   Layer 5 to 4   Message = ^`bdfhjlnprtvxz|~#^'

A:    63201.4808,   Layer 5 to 4   Message = _r(;Ocv,?Sgz0DWk~4H_

A:    63947.6559,   Layer 5 to 4   Message = `'Lq8^%Jo6[#Hm4Y~Fk2

A:    64676.8600,   Layer 5 to 4   Message = aapI!X1hAwP)`8oH~W0g

A:    65548.0072,   Layer 5 to 4   Message = bLb~iS=(pZExwbL6~iS=

A:    66760.9673,   Layer 5 to 4   Message = dfZcRNJFB=952-3%~zvr

A:    66794.0554,   Layer 5 to 4   Message = dq~.dIVdq~.;IVdq~.;I

A:    66906.0835,   Layer 5 to 4   Message = e&Ed%ec$Cb#Ba!A`~?_}

B:    66931.5617,   Layer 4 to 5   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

A:    68778.6169,   Layer 5 to 4   Message = f8i;l>fBrEuHxK{N~Q$T

A:    69303.3410,   Layer 5 to 4   Message = gKxqU9{gD(jN2tX<~cG+

A:    69572.8931,   Layer 5 to 4   Message = h^SI>4*}hi_TJ?5+~tj`

A:    71038.9347,   Layer 5 to 4   Message = ipw~(x6=EiSZbipw~(x6

A:    72027.0986,   Layer 5 to 4   Message = d%=Vo*C[txja24Mf~9Rk

A:    72275.0050,   Layer 5 to 4   Message = k7b.X%OyFp<k3^*T~KuB

A:    73095.6323,   Layer 5 to 4   Message = lf(dB}[9uS1ml)3C~]:v
```

```
A:    74156.0069,   Layer 5 to 4   Message = m]L;+xhWG6&scmB1~n^M

A:    75702.2876,   Layer 5 to 4   Message = nopqrstuvwxyz{n}~!#$

B:    75785.8083,   Layer 4 to 5   Message = 9g693a0^-Z*W'T$Q~N{K

A:    77340.5112,   Layer 5 to 4   Message = o$6I[n#5HZm!4GYo~3FX

A:    78152.4626,   Layer 5 to 4   Message = p6Z~EixSw=b(Lp6ZpEix

A:    78157.1329,   Layer 5 to 4   Message = dI~V.d;qI~V.2;qI~q.d

B:    78624.2100,   Layer 4 to 5   Message = :yZ;:[<{]=|^>}_?~`A!

A:    78651.8756,   Layer 5 to 4   Message = r[E.u_H1xbK4{eN7~hr:

A:    79448.3299,   Layer 5 to 4   Message = snid_YTOJE?:50+&~yts

B:    79642.9968,   Layer 4 to 5   Message = ;.~qd;I;.~qdVI;.~qdV

A:    81057.9337,   Layer 5 to 4   Message = t#x;HTamy(4AMYfr~-9F

B:    82395.3970,   Layer 4 to 5   Message = <AEIMQ<Y^bfjnrvz~%)-

A:    82564.8913,   Layer 5 to 4   Message = uuSq1Om-Ki)Ge%3a~>]z

A:    84363.5275,   Layer 5 to 4   Message = vHvIxJyKzL{M|N}O~P!Q

A:    84809.5562,   Layer 5 to 4   Message = wZ=wbE(iLxpS6wZ=~bE(

A:    85472.8448,   Layer 5 to 4   Message = dmbVx?4){peY2C7,~sh]

B:    86352.8958,   Layer 4 to 5   Message = =fi~6Lb=xEZp(=3i~6Lb

A:    86505.0045,   Layer 5 to 4   Message = y!(.4yAGMSY`flrx~'-3

A:    87261.3424,   Layer 5 to 4   Message = z4Ld{5ze|6Nf}7Og~8Ph

A:    88320.7988,   Layer 5 to 4   Message = {Gp;e0Y{NwCl7a,U~Js>

A:    89806.5239,   Layer 5 to 4   Message = |Y6qN+fC|Z7rO,gD~[8s

A:    91609.6360,   Layer 5 to 4   Message = }lZI7&raO},xgUD2~m[J

A:    92340.6855,   Layer 5 to 4   Message = ~fDUgx,=Oa~&7I3l}1CT

B:    93060.0964,   Layer 4 to 5   Message = dfxV}Gn7>(Ov2g0W~Ho8

A:    94142.4136,   Layer 5 to 4   Message = !3EVhy->Pbs'2J[m~2DU

A:    94506.7477,   Layer 5 to 4   Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:    95325.3681,   Layer 5 to 4   Message = $X$d:oFzQ(]3h>sJ~U,a

A:    95417.8740,   Layer 5 to 4   Message = %kS%$jR:#iQ9!hP8~gO7

B:    95483.6241,   Layer 4 to 5   Message = ?xS.gBzU0?D|W2kF~Y4m

A:    96619.9782,   Layer 5 to 4   Message = &}wq&e_XRLF?93-'~xrl

A:    97711.3516,   Layer 5 to 4   Message = '2=IT'kv$x:FQ]hs~,7C

B:    98127.6415,   Layer 4 to 5   Message = A-wdP<)s`LA%o[H4~kWD

A:    98249.9115,   Layer 5 to 4   Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:    99371.1809,   Layer 5 to 4   Message = dW(V'U&)%S$R2Q!P~O}N

B:   100176.2067,   Layer 4 to 5   Message = B?=;97531x-B)'%#~|zx
```

```
Printing the contents of the Simulation Event Q
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100345.215 A: Timer
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100799.479 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 100845.215 A: Timer


A:  100799.4793,  Layer 5 to 4  Message = *fL.nP2r*6vX:z3>~aC%


Printing the contents of the Simulation Event Q
Event Time = 100909.328 A: LAYER 5
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Printing the contents of the Simulation Event Q

Event Time = 100945.215 A: Timer

A: 100909.3276,   Layer 5 to 4   Message = +|pdWK>2&+k_RF9-~rfY

Printing the contents of the Simulation Event Q

Event Time = 101023.191 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 101023.191 A: LAYER 5

Event Time = 101045.215 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 101045.215 A: Timer

A: 101023.1906,   Layer 5 to 4   Message = ,16;AFKPUZ,ejoty~&+0

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 101545.215 A: Timer

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 101545.215 A: Timer

Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 103009.765 A: LAYER 5

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Event Time = 103009.765 A: LAYER 5

Printing the contents of the Simulation Event Q

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Event Time = 103009.765 A: LAYER 5



Printing the contents of the Simulation Event Q
Event Time = 103009.765 A: LAYER 5



Printing the contents of the Simulation Event Q
Event Time = 102296.032 A: Timer
Event Time = 103009.765 A: LAYER 5


B:  102219.4694,  Layer 4 to 5  Message = CRbq#2BQap!1CP`o~0?O

B:  102526.7400,  Layer 4 to 5  Message = De(Ij-No2St7XD<^~Bc&

A:  103009.7646,  Layer 5 to 4  Message = -DZq*AWn'=T-$:Qh~7Ne

B:  103051.2198,  Layer 4 to 5  Message = EwL~S(Zxb6i=pEEL~S(Z

A:  103314.0351,  Layer 5 to 4  Message = .V~Iq;d.V~Iq.d.V~Iq;

A:  103650.3994,  Layer 5 to 4  Message = xiE~Z6pL(b=wSxiE~Z6p

B:  104488.9328,  Layer 4 to 5  Message = d,pV<#gM3w^D2nTF~eK1

B:  105203.8259,  Layer 4 to 5  Message = Gf6.&{skcZRJB93)Gvnf

B:  114734.8375,  Layer 4 to 5  Message = HQZdmv!+4=GPYclu~H3<

B:  123149.5589,  Layer 4 to 5  Message = Id~;Vq.Id~;Vq.Id~;Iq

B:  125789.9409,  Layer 4 to 5  Message = JvEq?l:g5b0]+W&R~MyJ

B:  138418.0307,  Layer 4 to 5  Message = K+iI)gG'eE%cC#aA~_>|

B:  144984.4826,  Layer 4 to 5  Message = LLx~pbSE6(wiZL=x~pbS

B:  149113.4924,  Layer 4 to 5  Message = dPMVY]`cfilo2ux{~$'*

B:  149921.5007,  Layer 4 to 5  Message = NcwNCWl#7Lau,AUj~5J_

B:  151771.7047,  Layer 4 to 5  Message = Ou=dORxAgxU{Dj2X~Gm5

B:  152501.9664,  Layer 4 to 5  Message = Pfb;sP'_8pJ$[53G~X2j

B:  156624.1951,  Layer 4 to 5  Message = Q<(q]HQ|hS>*s_J5~jUA

B:  156769.1733,  Layer 4 to 5  Message = ROLIFC?R9630-*'$~{xu

B:  159636.2681,  Layer 4 to 5  Message = Sbp~x=LZSw(6ESbp~x=L

B:  161259.8625,  Layer 4 to 5  Message = dt6Vv8Xx:Tz<2|>_~Aa#

B:  167126.8853,  Layer 4 to 5  Message = U)Z.`3e8j=UCtHyM~R&W

B:  170355.3765,  Layer 4 to 5  Message = V;~dI.qV;~dV.qV;~dI.

B:  170565.2635,  Layer 4 to 5  Message = WNE;2)}tkbXOW<3*~ulc

B:  175025.6465,  Layer 4 to 5  Message = Xaiqy$,4<EMU^Xnv~)19
```

```
B:  177033.8483,  Layer 4 to 5  Message = YfxIc|8Rl(B[u1Ye~:Tn

B:  179591.4557,  Layer 4 to 5  Message = Z(S~LwEp=i6bxZ(Z~LwE

B:  182702.7988,  Layer 4 to 5  Message = d:wV5rQ0mL+h2&cB[^<y

B:  186161.9017,  Layer 4 to 5  Message = ]M=.|m^N>x}n_O?0~]`P

B:  190485.8554,  Layer 4 to 5  Message = ^`bdfhjlnprtvxz|~#^'

B:  192618.9321,  Layer 4 to 5  Message = _r(;Ocv,?Sgz0DWk~4H_

B:  197410.0144,  Layer 4 to 5  Message = `'Lq8^%Jo6[#Hm4Y~Fk2

B:  199240.3001,  Layer 4 to 5  Message = aapI!X1hAwP)`8oH~W0g

B:  200062.9655,  Layer 4 to 5  Message = bLb~iS=(pZExwbL6~iS=

B:  200089.0489,  Layer 4 to 5  Message = dfZcRNJFB=952-3%~zvr

B:  202215.1272,  Layer 4 to 5  Message = dq~.dIVdq~.;IVdq~.;I
```

Printing the contents of the Simulation Event Q

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Printing the contents of the Simulation Event Q
Event Time = 202888.717 A: Timer

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Event Time = 202888.717 A: Timer

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Event Time = 203205.566 A: Timer

B: 203112.7351, Layer 4 to 5 Message = e&Ed%ec$Cb#Ba!A`~?_}

B: 214897.2003, Layer 4 to 5 Message = f8i;l>fBrEuHxK{N~Q$T

B: 216123.5740, Layer 4 to 5 Message = gKxqU9{gD(jN2tX<~cG+

B: 224007.2998, Layer 4 to 5 Message = h^SI>4*}hi_TJ?5+~tj`

B: 225610.9947, Layer 4 to 5 Message = ipw~(x6=EiSZbipw~(x6

B: 228221.3784, Layer 4 to 5 Message = d%=Vo*C[txja24Mf~9Rk

B: 234356.0785, Layer 4 to 5 Message = k7b.X%OyFp<k3^*T~KuB

B: 235390.7769, Layer 4 to 5 Message = lf(dB}[9uS1ml)3C~]:v

B: 237029.1932, Layer 4 to 5 Message = m]L;+xhWG6&scmB1~n^M

B: 237864.1711, Layer 4 to 5 Message = nopqrstuvwxyz{n}~!#$

B: 248951.7902, Layer 4 to 5 Message = o$6I[n#5HZm!4GYo~3FX

B: 250620.3723, Layer 4 to 5 Message = p6Z~EixSw=b(Lp6ZpEix

B: 250677.3869, Layer 4 to 5 Message = dI~V.d;qI~V.2;qI~q.d

B: 251804.2269, Layer 4 to 5 Message = r[E.u_H1xbK4{eN7~hr:

B: 258208.1237, Layer 4 to 5 Message = snid_YTOJE?:50+&~yts

B: 258641.8071, Layer 4 to 5 Message = t#x;HTamy(4AMYfr~-9F

B: 263179.9824, Layer 4 to 5 Message = uuSq1Om-Ki)Ge%3a~>]z

B: 265389.8819, Layer 4 to 5 Message = vHvIxJyKzL{M|N}O~P!Q

B: 268701.5818, Layer 4 to 5 Message = wZ=wbE(iLxpS6wZ=~bE(

B: 269756.8066, Layer 4 to 5 Message = dmbVx?4){peY2C7,~sh]

B: 271292.6331, Layer 4 to 5 Message = y!(.4yAGMSY`flrx~'-3

B: 279664.1352, Layer 4 to 5 Message = z4Ld{5ze|6Nf}7Og~8Ph

```
B:  282178.3239,  Layer 4 to 5  Message = {Gp;e0Y{NwCl7a,U~Js>

B:  283377.7671,  Layer 4 to 5  Message = |Y6qN+fC|Z7rO,gD~[8s

B:  284008.6965,  Layer 4 to 5  Message = }lZI7&raO},xgUD2~m[J

B:  285617.6250,  Layer 4 to 5  Message = ~fDUgx,=Oa~&7I3l}1CT

B:  292787.5851,  Layer 4 to 5  Message = !3EVhy->Pbs'2J[m~2DU

B:  294408.2446,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:  301827.8124,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

B:  309830.6184,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

B:  311970.9188,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

B:  313092.3209,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

B:  315921.4879,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw


Printing the contents of the Simulation Event Q



Printing the contents of the Simulation Event Q
Event Time = 316107.423 A: Timer



Printing the contents of the Simulation Event Q



Printing the contents of the Simulation Event Q



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Printing the contents of the Simulation Event Q
Event Time = 317007.423 A: Timer

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Printing the contents of the Simulation Event Q
Event Time = 317225.552 A: Timer

B: 317149.1527, Layer 4 to 5 Message = dW(V'U&)%S$R2Q!P~O}N
B: 319185.7741, Layer 4 to 5 Message = *fL.nP2r*6vX:z3>~aC%

Simulator terminated at time 319260.562278
 after receiving 100 msgs at layer5
Simulator Analysis:
  Number of messages sent from 5 to 4: 104
  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: 3937

Average number of packets already in network: 0.000

Number of packets that the network lost: 3152

Number of packets that the network corrupted: 159

Number of packets that the network put out of order: 143

3. Low packet loss, high corruption, and out-of-order probabilities

    Number of Messages: 100

    Lost Packet Prob.: 0.2

    Corrupt Packet Prob.: 0.8

    Out Of Order Prob.: 0.8

    Ave. time between messages: 1000

    Trace level: 1

    Randomize: 1

    Bi-directional: 0

```
A:    1871.1091,  Layer 5 to 4  Message = !fEVhy->Pbs'2J3m~2DU

B:    2276.2500,  Layer 4 to 5  Message = !fEVhy->Pbs'2J3m~2DU

A:    3602.0659,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:    4139.7819,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:    4393.6162,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

B:    4593.4620,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

A:    5559.3946,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

B:    5918.2342,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

A:    6122.1704,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

B:    6605.7206,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

A:    7448.5753,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

B:    7500.6262,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

A:    7693.2302,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:    7970.0695,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:    8123.1229,  Layer 5 to 4  Message = dW(V'U&)%S$R2Q!P~O}N

A:    8407.8746,  Layer 5 to 4  Message = *jL.nP2r*6vX:z]>~aC%

B:    8481.4939,  Layer 4 to 5  Message = dW(V'U&)%S$R2Q!P~O}N

A:    9175.2921,  Layer 5 to 4  Message = +fpdWK>2&+k_RF3-~rfY

B:    9261.7329,  Layer 4 to 5  Message = *jL.nP2r*6vX:z]>~aC%

B:    9556.4681,  Layer 4 to 5  Message = +fpdWK>2&+k_RF3-~rfY

A:   10442.3657,  Layer 5 to 4  Message = ,16;AFKPUZ,ejoty~&+0

B:   11194.2310,  Layer 4 to 5  Message = ,16;AFKPUZ,ejoty~&+0

A:   11603.5736,  Layer 5 to 4  Message = -DZq*AWn'=T-$:Qh~7Ne

B:   11862.1096,  Layer 4 to 5  Message = -DZq*AWn'=T-$:Qh~7Ne
```

```
A:   12172.3255,   Layer 5 to 4   Message = .V~Iq;d.V~Iq.d.V~Iq;

A:   12614.8118,   Layer 5 to 4   Message = xiE~Z6pL(b=wSxiE~Z6p

B:   13035.5425,   Layer 4 to 5   Message = .V~Iq;d.V~Iq.d.V~Iq;

A:   13505.9125,   Layer 5 to 4   Message = d{iVD1|jWE2}2X03~lYG

B:   13614.5931,   Layer 4 to 5   Message = xiE~Z6pL(b=wSxiE~Z6p

A:   13879.4320,   Layer 5 to 4   Message = 10x.-,+*)('&%$#1~}|{

B:   14426.3761,   Layer 4 to 5   Message = d{iVD1|jWE2}2X03~lYG

B:   14769.0692,   Layer 4 to 5   Message = 10x.-,+*)('&%$#1~}|{

A:   15392.3715,   Layer 5 to 4   Message = 2CSdt'7HXiy,<M^n21BR

B:   15416.7799,   Layer 4 to 5   Message = 2CSdt'7HXiy,<M^n21BR

A:   16540.3165,   Layer 5 to 4   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:   16673.6889,   Layer 4 to 5   Message = 3Uw;^!Df*Ln2Tv:]~3e)

A:   17918.7863,   Layer 5 to 4   Message = 4f=qGzP&Yxc8lB3K~T4^

B:   17983.8274,   Layer 4 to 5   Message = 4f=qGzP&Yxc8lB3K~T4^

A:   19190.5723,   Layer 5 to 4   Message = 5zbI0u]D+pW>&kR9~fM5

A:   19292.4719,   Layer 5 to 4   Message = 6x(~wpibZSLE=6x(~wpi

B:   19292.4932,   Layer 4 to 5   Message = 5zbI0u]D+pW>&kR9~fM5

B:   19808.2738,   Layer 4 to 5   Message = 6x(~wpibZSLE=6x(~wpi

A:   20654.7599,   Layer 5 to 4   Message = d7LVaku!,6AK2`jt~+5?

B:   20681.9888,   Layer 4 to 5   Message = d7LVaku!,6AK2`jt~+5?

A:   21763.0685,   Layer 5 to 4   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

B:   21897.8609,   Layer 4 to 5   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

A:   22146.0750,   Layer 5 to 4   Message = 9g693a0^-Z*W'T$Q~N{K

B:   22293.0900,   Layer 4 to 5   Message = 9g693a0^-Z*W'T$Q~N{K

A:   22571.3817,   Layer 5 to 4   Message = :yZ;:[<{]=|^>}_?~`A!

B:   23071.2441,   Layer 4 to 5   Message = :yZ;:[<{]=|^>}_?~`A!

A:   23664.6283,   Layer 5 to 4   Message = ;.~qd;I;.~qdVI;.~qdV

B:   23836.3789,   Layer 4 to 5   Message = ;.~qd;I;.~qdVI;.~qdV

A:   24282.9357,   Layer 5 to 4   Message = <AEIMQ<Y^bfjnrvz~%)-

B:   24321.8189,   Layer 4 to 5   Message = <AEIMQ<Y^bfjnrvz~%)-

A:   24693.7439,   Layer 5 to 4   Message = =fi~6Lb=xEZp(=3i~6Lb

B:   25259.6903,   Layer 4 to 5   Message = =fi~6Lb=xEZp(=3i~6Lb

A:   26375.1119,   Layer 5 to 4   Message = dfxV}Gn7>(Ov2g0W~Ho8

B:   26878.7290,   Layer 4 to 5   Message = dfxV}Gn7>(Ov2g0W~Ho8

A:   27346.0591,   Layer 5 to 4   Message = ?xS.gBzU0?D|W2kF~Y4m

B:   27581.7685,   Layer 4 to 5   Message = ?xS.gBzU0?D|W2kF~Y4m
```

```
A:    28315.8798,   Layer 5 to 4   Message = A-wdP<)s`LA%o[H4~kWD

B:    28672.0501,   Layer 4 to 5   Message = A-wdP<)s`LA%o[H4~kWD

A:    30027.5271,   Layer 5 to 4   Message = B?=;97531x-B)'%#~|zx

B:    30034.2580,   Layer 4 to 5   Message = B?=;97531x-B)'%#~|zx
```

Printing the contents of the Simulation Event Q

Event Time = 30127.527 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30139.034 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30139.034 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30160.734 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30160.734 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30164.378 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30164.378 A: Timer

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30180.974 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30276.598 A: Timer

A: 30180.9735,   Layer 5 to 4   Message = CRbq#2BQap!1CP`o~0?O

Printing the contents of the Simulation Event Q

Event Time = 31458.650 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30376.598 A: Timer

Event Time = 31458.650 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30376.598 A: Timer

Event Time = 31458.650 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30387.975 A: Timer

Event Time = 31458.650 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 30387.975 A: Timer

Event Time = 31458.650 A: LAYER 5

```
Printing the contents of the Simulation Event Q

Event Time = 30415.443 A: Timer

Event Time = 31458.650 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 30415.443 A: Timer

Event Time = 31458.650 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 30440.450 A: Timer

Event Time = 31458.650 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 31458.650 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 30540.450 A: Timer

Event Time = 31458.650 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 30540.450 A: Timer

Event Time = 31458.650 A: LAYER 5
```

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Printing the contents of the Simulation Event Q

Event Time = 30558.014 A: Timer

Event Time = 31458.650 A: LAYER 5
```

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Printing the contents of the Simulation Event Q
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Event Time = 30558.014 A: Timer
Event Time = 31458.650 A: LAYER 5



Printing the contents of the Simulation Event Q
Event Time = 30565.907 A: Timer
Event Time = 31458.650 A: LAYER 5


B:    30471.5100,   Layer 4 to 5   Message = CRbq#2BQap!1CP`o~0?O
A:    31458.6498,   Layer 5 to 4   Message = De(Ij-No2St7XD<^~Bc&
B:    31837.9446,   Layer 4 to 5   Message = De(Ij-No2St7XD<^~Bc&
A:    32847.1196,   Layer 5 to 4   Message = EwL~S(Zxb6i=pEEL~S(Z
A:    33000.5778,   Layer 5 to 4   Message = d,pV<#gM3w^D2nTF~eK1
B:    33067.0450,   Layer 4 to 5   Message = EwL~S(Zxb6i=pEEL~S(Z
B:    33678.1516,   Layer 4 to 5   Message = d,pV<#gM3w^D2nTF~eK1
A:    34906.8909,   Layer 5 to 4   Message = Gf6.&{skcZRJB93)Gvnf
B:    34910.6323,   Layer 4 to 5   Message = Gf6.&{skcZRJB93)Gvnf
A:    36797.4822,   Layer 5 to 4   Message = HQZdmv!+4=GPYclu~H3<
B:    36902.3561,   Layer 4 to 5   Message = HQZdmv!+4=GPYclu~H3<
A:    37536.3151,   Layer 5 to 4   Message = Id~;Vq.Id~;Vq.Id~;Iq
B:    38032.4177,   Layer 4 to 5   Message = Id~;Vq.Id~;Vq.Id~;Iq
A:    38272.2206,   Layer 5 to 4   Message = JvEq?l:g5b0]+W&R~MyJ
B:    38501.6022,   Layer 4 to 5   Message = JvEq?l:g5b0]+W&R~MyJ
A:    38656.0446,   Layer 5 to 4   Message = K+iI)gG'eE%cC#aA~_>|
A:    39619.1201,   Layer 5 to 4   Message = LLx~pbSE6(wiZL=x~pbS
B:    39825.4816,   Layer 4 to 5   Message = K+iI)gG'eE%cC#aA~_>|
B:    40396.3395,   Layer 4 to 5   Message = LLx~pbSE6(wiZL=x~pbS
A:    40822.7254,   Layer 5 to 4   Message = dPMVY]`cfilo2ux{~$'*
A:    41289.0963,   Layer 5 to 4   Message = NcwNCWl#7Lau,AUj~5J_
B:    42048.7397,   Layer 4 to 5   Message = dPMVY]`cfilo2ux{~$'*
B:    42224.1267,   Layer 4 to 5   Message = NcwNCWl#7Lau,AUj~5J_
A:    42280.2670,   Layer 5 to 4   Message = Ou=dORxAgxU{Dj2X~Gm5
B:    42472.9593,   Layer 4 to 5   Message = Ou=dORxAgxU{Dj2X~Gm5
A:    43150.1009,   Layer 5 to 4   Message = Pfb;sP'_8pJ$[53G~X2j
B:    43158.5359,   Layer 4 to 5   Message = Pfb;sP'_8pJ$[53G~X2j
A:    44384.4417,   Layer 5 to 4   Message = Q<(q]HQ|hS>*s_J5~jUA
```

```
B:   44709.4340,   Layer 4 to 5   Message = Q<(q]HQ|hS>*s_J5~jUA

A:   45599.6455,   Layer 5 to 4   Message = ROLIFC?R9630-*'$~{xu

B:   45603.5763,   Layer 4 to 5   Message = ROLIFC?R9630-*'$~{xu

A:   47039.5733,   Layer 5 to 4   Message = Sbp~x=LZSw(6ESbp~x=L

B:   47056.7466,   Layer 4 to 5   Message = Sbp~x=LZSw(6ESbp~x=L

A:   48029.5543,   Layer 5 to 4   Message = dt6Vv8Xx:Tz<2|>_~Aa#

B:   48038.3534,   Layer 4 to 5   Message = dt6Vv8Xx:Tz<2|>_~Aa#

A:   49702.1224,   Layer 5 to 4   Message = U)Z.`3e8j=UCtHyM~R&W

B:   49710.0468,   Layer 4 to 5   Message = U)Z.`3e8j=UCtHyM~R&W

A:   50893.6442,   Layer 5 to 4   Message = V;~dI.qV;~dV.qV;~dI.

A:   50914.4970,   Layer 5 to 4   Message = WNE;2)}tkbXOW<3*~ulc

B:   51349.3254,   Layer 4 to 5   Message = V;~dI.qV;~dV.qV;~dI.

A:   52053.2383,   Layer 5 to 4   Message = Xaiqy$,4<EMU^Xnv~)19

B:   52894.3587,   Layer 4 to 5   Message = WNE;2)}tkbXOW<3*~ulc

A:   53221.3325,   Layer 5 to 4   Message = YfxIc|8Rl(B[u1Ye~:Tn

B:   53514.5962,   Layer 4 to 5   Message = Xaiqy$,4<EMU^Xnv~)19

A:   53649.0042,   Layer 5 to 4   Message = Z(S~LwEp=i6bxZ(Z~LwE

B:   54009.5147,   Layer 4 to 5   Message = YfxIc|8Rl(B[u1Ye~:Tn

B:   54517.2150,   Layer 4 to 5   Message = Z(S~LwEp=i6bxZ(Z~LwE

A:   55614.2123,   Layer 5 to 4   Message = d:wV5rQ0mL+h2&cB[^<y

B:   56375.0176,   Layer 4 to 5   Message = d:wV5rQ0mL+h2&cB[^<y

A:   56401.2526,   Layer 5 to 4   Message = ]M=.|m^N>x}n_O?0~]`P

B:   56664.5371,   Layer 4 to 5   Message = ]M=.|m^N>x}n_O?0~]`P

A:   57701.1771,   Layer 5 to 4   Message = ^`bdfhjlnprtvxz|~#^'

A:   58846.9988,   Layer 5 to 4   Message = _r(;Ocv,?Sgz0DWk~4H_

B:   59105.8707,   Layer 4 to 5   Message = ^`bdfhjlnprtvxz|~#^'

B:   59413.8920,   Layer 4 to 5   Message = _r(;Ocv,?Sgz0DWk~4H_

A:   60736.2537,   Layer 5 to 4   Message = `'Lq8^%Jo6[#Hm4Y~Fk2

B:   61065.2099,   Layer 4 to 5   Message = `'Lq8^%Jo6[#Hm4Y~Fk2

A:   62642.2624,   Layer 5 to 4   Message = aapI!X1hAwP)`8oH~W0g

B:   62648.3513,   Layer 4 to 5   Message = aapI!X1hAwP)`8oH~W0g

A:   63292.2877,   Layer 5 to 4   Message = bLb~iS=(pZExwbL6~iS=

B:   63303.0394,   Layer 4 to 5   Message = bLb~iS=(pZExwbL6~iS=

A:   64133.2455,   Layer 5 to 4   Message = dfZcRNJFB=952-3%~zvr

B:   64142.3397,   Layer 4 to 5   Message = dfZcRNJFB=952-3%~zvr

A:   66004.6004,   Layer 5 to 4   Message = dq~.dIVdq~.;IVdq~.;I
```

```
B:    66618.4650,  Layer 4 to 5  Message = dq~.dIVdq~.;IVdq~.;I
```

Printing the contents of the Simulation Event Q
Event Time = 66726.105 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 66808.568 A: Timer

```
A:    66726.1051,  Layer 5 to 4  Message = e&Ed%ec$Cb#Ba!A`~?_}
```

Printing the contents of the Simulation Event Q
Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 66908.568 A: Timer
Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 66908.568 A: Timer
Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 66936.683 A: Timer
Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 68167.719 A: LAYER 5

```
Printing the contents of the Simulation Event Q

Event Time = 67136.683 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67136.683 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67155.116 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67155.116 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67178.345 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67278.345 A: Timer

Event Time = 68167.719 A: LAYER 5
```

Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67378.345 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67378.345 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67390.968 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67390.968 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67414.714 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67414.714 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67426.669 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67426.669 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67459.927 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67559.927 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67559.927 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

```
Event Time = 67771.093 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67771.093 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67780.463 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67780.463 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67786.169 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67786.169 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 67794.459 A: Timer

Event Time = 68167.719 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5
```

Printing the contents of the Simulation Event Q

Event Time = 67894.459 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 67894.459 A: Timer

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 68167.719 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 68008.911 A: Timer

Event Time = 68167.719 A: LAYER 5


```
B:    67916.0299,  Layer 4 to 5  Message = e&Ed%ec$Cb#Ba!A`~?_}
A:    68167.7194,  Layer 5 to 4  Message = f8i;l>fBrEuHxK{N~Q$T
B:    68359.7100,  Layer 4 to 5  Message = f8i;l>fBrEuHxK{N~Q$T
A:    70137.5059,  Layer 5 to 4  Message = gKxqU9{gD(jN2tX<~cG+
B:    70676.6297,  Layer 4 to 5  Message = gKxqU9{gD(jN2tX<~cG+
A:    71009.5488,  Layer 5 to 4  Message = h^SI>4*}hi_TJ?5+~tj`
A:    71321.0363,  Layer 5 to 4  Message = ipw~(x6=EiSZbipw~(x6
A:    71462.3133,  Layer 5 to 4  Message = d%=Vo*C[txja24Mf~9Rk
B:    71602.9130,  Layer 4 to 5  Message = h^SI>4*}hi_TJ?5+~tj`
B:    72034.9147,  Layer 4 to 5  Message = ipw~(x6=EiSZbipw~(x6
A:    72112.9995,  Layer 5 to 4  Message = k7b.X%OyFp<k3^*T~KuB
B:    72572.3385,  Layer 4 to 5  Message = d%=Vo*C[txja24Mf~9Rk
B:    72842.5041,  Layer 4 to 5  Message = k7b.X%OyFp<k3^*T~KuB
A:    73890.0478,  Layer 5 to 4  Message = lf(dB}[9uS1ml)3C~]:v
B:    73926.4470,  Layer 4 to 5  Message = lf(dB}[9uS1ml)3C~]:v
A:    75871.5945,  Layer 5 to 4  Message = m]L;+xhWG6&scmB1~n^M
```

```
B:   75975.0398,   Layer 4 to 5   Message = m]L;+xhWG6&scmB1~n^M

A:   77187.0101,   Layer 5 to 4   Message = nopqrstuvwxyz{n}~!#$

A:   77194.2425,   Layer 5 to 4   Message = o$6I[n#5HZm!4GYo~3FX

B:   77205.6167,   Layer 4 to 5   Message = nopqrstuvwxyz{n}~!#$

B:   77653.6967,   Layer 4 to 5   Message = o$6I[n#5HZm!4GYo~3FX

A:   78197.4544,   Layer 5 to 4   Message = p6Z~EixSw=b(Lp6ZpEix

A:   78814.0520,   Layer 5 to 4   Message = dI~V.d;qI~V.2;qI~q.d

B:   79272.7070,   Layer 4 to 5   Message = p6Z~EixSw=b(Lp6ZpEix

B:   80066.7857,   Layer 4 to 5   Message = dI~V.d;qI~V.2;qI~q.d

A:   80728.2667,   Layer 5 to 4   Message = r[E.u_H1xbK4{eN7~hr:

A:   81253.3348,   Layer 5 to 4   Message = snid_YTOJE?:50+&~yts

B:   81301.3406,   Layer 4 to 5   Message = r[E.u_H1xbK4{eN7~hr:

B:   82168.1461,   Layer 4 to 5   Message = snid_YTOJE?:50+&~yts

A:   82353.2141,   Layer 5 to 4   Message = t#x;HTamy(4AMYfr~-9F

B:   82557.4234,   Layer 4 to 5   Message = t#x;HTamy(4AMYfr~-9F

A:   83141.6960,   Layer 5 to 4   Message = uuSq1Om-Ki)Ge%3a~>]z

B:   83505.8785,   Layer 4 to 5   Message = uuSq1Om-Ki)Ge%3a~>]z

A:   84878.3020,   Layer 5 to 4   Message = vHvIxJyKzL{M|N}O~P!Q

B:   84885.2239,   Layer 4 to 5   Message = vHvIxJyKzL{M|N}O~P!Q

A:   85137.8896,   Layer 5 to 4   Message = wZ=wbE(iLxpS6wZ=~bE(

B:   85142.6070,   Layer 4 to 5   Message = wZ=wbE(iLxpS6wZ=~bE(

A:   86937.3338,   Layer 5 to 4   Message = dmbVx?4){peY2C7,~sh]

B:   87396.4459,   Layer 4 to 5   Message = dmbVx?4){peY2C7,~sh]

A:   88643.6715,   Layer 5 to 4   Message = y!(.4yAGMSY`flrx~'-3

B:   88867.7203,   Layer 4 to 5   Message = y!(.4yAGMSY`flrx~'-3

A:   89393.7140,   Layer 5 to 4   Message = z4Ld{5ze|6Nf}7Og~8Ph

B:   89397.3985,   Layer 4 to 5   Message = z4Ld{5ze|6Nf}7Og~8Ph

A:   89782.7683,   Layer 5 to 4   Message = {Gp;e0Y{NwCl7a,U~Js>

B:   90066.3095,   Layer 4 to 5   Message = {Gp;e0Y{NwCl7a,U~Js>

A:   90247.0647,   Layer 5 to 4   Message = |Y6qN+fC|Z7rO,gD~[8s

B:   90708.5526,   Layer 4 to 5   Message = |Y6qN+fC|Z7rO,gD~[8s

A:   90767.7233,   Layer 5 to 4   Message = }lZI7&raO},xgUD2~m[J

B:   90889.3327,   Layer 4 to 5   Message = }lZI7&raO},xgUD2~m[J

A:   91856.3915,   Layer 5 to 4   Message = ~fDUgx,=Oa~&7I3l}1CT

B:   92117.3737,   Layer 4 to 5   Message = ~fDUgx,=Oa~&7I3l}1CT

A:   92558.7952,   Layer 5 to 4   Message = !3EVhy->Pbs'2J[m~2DU
```

```
A:    93479.9955,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:    93794.6739,  Layer 4 to 5  Message = !3EVhy->Pbs'2J[m~2DU

B:    94847.8023,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:    95076.2149,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

B:    95335.2635,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

A:    95738.3018,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

B:    95863.5109,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

A:    97138.6010,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

B:    97157.2623,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

A:    97299.6999,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

A:    98286.3680,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:    98431.1092,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

B:    99375.3819,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw


Printing the contents of the Simulation Event Q
Event Time = 99458.348 A: Timer
Event Time = 99674.088 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99486.700 A: Timer
Event Time = 99674.088 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99486.700 A: Timer
Event Time = 99674.088 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99510.828 A: Timer
Event Time = 99674.088 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99510.828 A: Timer
```

Event Time = 99674.088 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 99525.087 A: Timer

Event Time = 99674.088 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 99674.088 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 99674.088 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 99674.088 A: LAYER 5

Event Time = 99725.087 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 99725.087 A: Timer

A: 99674.0882,   Layer 5 to 4   Message = dW(V'U&)%S$R2Q!P~O}N

Printing the contents of the Simulation Event Q

Event Time = 101275.298 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 99825.087 A: Timer

Event Time = 101275.298 A: LAYER 5

Printing the contents of the Simulation Event Q

```
Event Time = 99825.087 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99838.065 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99838.065 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99856.903 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99856.903 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99966.987 A: Timer
Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 99966.987 A: Timer
Event Time = 101275.298 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q

Event Time = 101275.298 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 100072.409 A: Timer

Event Time = 101275.298 A: LAYER 5


B:   99976.1951,  Layer 4 to 5  Message = dW(V'U&)%S$R2Q!P~O}N

A:  101275.2982,  Layer 5 to 4  Message = *fL.nP2r*6vX:z3>~aC%

B:  101391.7184,  Layer 4 to 5  Message = *fL.nP2r*6vX:z3>~aC%




Simulator terminated at time 101393.502314

 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: 2205

  Average number of packets already in network:     0.000

  Number of packets that the network lost: 455

  Number of packets that the network corrupted: 1395

  Number of packets that the network put out of order: 1417
```

4. Average packet loss, corruption, and out-of-order probabilities

Number of Messages: 100

Lost Packet Prob.: 0.5

Corrupt Packet Prob.: 0.5

Out Of Order Prob.: 0.5

Ave. time between messages: 500

Trace level: 1

Randomize: 1

Bi-directional: 0

```
A:     37.0507,  Layer 5 to 4  Message = !fEVhy->Pbs'2J3m~2DU

B:    167.0242,  Layer 4 to 5  Message = !fEVhy->Pbs'2J3m~2DU

A:    748.7420,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:    850.0219,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:   1084.1648,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

B:   1213.7523,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

A:   1540.4653,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

B:   1567.2913,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

A:   2135.6930,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

B:   2360.2558,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

A:   2491.2489,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

A:   2767.2369,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:   3086.8436,  Layer 5 to 4  Message = dW(V'U&)%S$R2Q!P~O}N

A:   3181.9388,  Layer 5 to 4  Message = *jL.nP2r*6vX:z]>~aC%

A:   3407.2278,  Layer 5 to 4  Message = +fpdWK>2&+k_RF3-~rfY

A:   3686.2656,  Layer 5 to 4  Message = ,16;AFKPUZ,ejoty~&+0

B:   4098.0662,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

A:   4388.5200,  Layer 5 to 4  Message = -DZq*AWn'=T-$:Qh~7Ne

A:   5118.3377,  Layer 5 to 4  Message = .V~Iq;d.V~Iq.d.V~Iq;

A:   5798.9007,  Layer 5 to 4  Message = xiE~Z6pL(b=wSxiE~Z6p

A:   6767.9256,  Layer 5 to 4  Message = d{iVD1|jWE2}2X03~lYG

B:   6981.8723,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:   7385.0568,  Layer 5 to 4  Message = 10x.-,+*)('&%$#1~}|{

A:   7605.2904,  Layer 5 to 4  Message = 2CSdt'7HXiy,<M^n21BR
```

```
A:    7807.0651,   Layer 5 to 4   Message = 3Uw;^!Df*Ln2Tv:]~3e)

A:    8557.1985,   Layer 5 to 4   Message = 4f=qGzP&Yxc8lB3K~T4^

B:    9128.4139,   Layer 4 to 5   Message = dW(V'U&)%S$R2Q!P~O}N

A:    9222.2941,   Layer 5 to 4   Message = 5zbI0u]D+pW>&kR9~fM5

A:    9554.5493,   Layer 5 to 4   Message = 6x(~wpibZSLE=6x(~wpi

B:    9764.6254,   Layer 4 to 5   Message = *jL.nP2r*6vX:z]>~aC%

A:    9788.9000,   Layer 5 to 4   Message = d7LVaku!,6AK2`jt~+5?

A:   10786.4665,   Layer 5 to 4   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

A:   11213.0065,   Layer 5 to 4   Message = 9g693a0^-Z*W'T$Q~N{K

B:   11408.2745,   Layer 4 to 5   Message = +fpdWK>2&+k_RF3~~rfY

A:   11845.4165,   Layer 5 to 4   Message = :yZ;:[<{]=|^>}_?~`A!

A:   12396.5697,   Layer 5 to 4   Message = ;.~qd;I;.~qdVI;.~qdV

A:   13282.3233,   Layer 5 to 4   Message = <AEIMQ<Y^bfjnrvz~%)-

A:   13300.4618,   Layer 5 to 4   Message = =fi~6Lb=xEZp(=3i~6Lb

B:   14113.5516,   Layer 4 to 5   Message = ,16;AFKPUZ,ejoty~&+0

A:   14154.7077,   Layer 5 to 4   Message = dfxV}Gn7>(Ov2g0W~Ho8

A:   14535.5254,   Layer 5 to 4   Message = ?xS.gBzU0?D|W2kF~Y4m

A:   14704.5153,   Layer 5 to 4   Message = A-wdP<)s`LA%o[H4~kWD

A:   15097.2736,   Layer 5 to 4   Message = B?=;97531x-B)'%#~|zx

A:   15457.9514,   Layer 5 to 4   Message = CRbq#2BQap!1CP`o~0?O

B:   15609.1141,   Layer 4 to 5   Message = -DZq*AWn'=T-$:Qh~7Ne

A:   15819.0392,   Layer 5 to 4   Message = De(Ij-No2St7XD<^~Bc&

A:   16491.8710,   Layer 5 to 4   Message = EwL~S(Zxb6i=pEEL~S(Z

A:   17036.3273,   Layer 5 to 4   Message = d,pV<#gM3w^D2nTF~eK1

B:   17231.9670,   Layer 4 to 5   Message = .V~Iq;d.V~Iq.d.V~Iq;

A:   17420.2662,   Layer 5 to 4   Message = Gf6.&{skcZRJB93)Gvnf

A:   17454.4403,   Layer 5 to 4   Message = HQZdmv!+4=GPYclu~H3<

A:   18053.4689,   Layer 5 to 4   Message = Id~;Vq.Id~;Vq.Id~;Iq

B:   18393.7315,   Layer 4 to 5   Message = xiE~Z6pL(b=wSxiE~Z6p

B:   18550.2325,   Layer 4 to 5   Message = d{iVD1|jWE2}2X03~lYG

B:   18756.9865,   Layer 4 to 5   Message = 10x.-,+*)('&%$#1~}|{

A:   18936.5362,   Layer 5 to 4   Message = JvEq?l:g5b0]+W&R~MyJ

A:   19037.1165,   Layer 5 to 4   Message = K+iI)gG'eE%cC#aA~_>|

B:   19207.0804,   Layer 4 to 5   Message = 2CSdt'7HXiy,<M^n21BR

B:   19318.5070,   Layer 4 to 5   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:   19431.4093,   Layer 4 to 5   Message = 4f=qGzP&Yxc8lB3K~T4^
```

```
B:    19534.2765,  Layer 4 to 5  Message = 5zbI0u]D+pW>&kR9~fM5

A:    19815.0775,  Layer 5 to 4  Message = LLx~pbSE6(wiZL=x~pbS

B:    19913.6877,  Layer 4 to 5  Message = 6x(~wpibZSLE=6x(~wpi

B:    20157.7649,  Layer 4 to 5  Message = d7LVaku!,6AK2`jt~+5?

A:    20324.5541,  Layer 5 to 4  Message = dPMVY]`cfilo2ux{~$'*

A:    20616.5302,  Layer 5 to 4  Message = NcwNCWl#7Lau,AUj~5J_

A:    20802.2595,  Layer 5 to 4  Message = Ou=dORxAgxU{Dj2X~Gm5

B:    20967.7574,  Layer 4 to 5  Message = 8T8.Jf$?[w5Qm+Gc~<Xt

A:    21353.0624,  Layer 5 to 4  Message = Pfb;sP'_8pJ$[53G~X2j

B:    21801.4786,  Layer 4 to 5  Message = 9g693a0^-Z*W'T$Q~N{K

A:    22203.9295,  Layer 5 to 4  Message = Q<(q]HQ|hS>*s_J5~jUA

B:    22707.7296,  Layer 4 to 5  Message = :yZ;:[<{]=|^>}_?~`A!

A:    22880.5069,  Layer 5 to 4  Message = ROLIFC?R9630-*'$~{xu

B:    23049.9315,  Layer 4 to 5  Message = ;.~qd;I;.~qdVI;.~qdV

A:    23733.3692,  Layer 5 to 4  Message = Sbp~x=LZSw(6ESbp~x=L

B:    23947.7745,  Layer 4 to 5  Message = <AEIMQ<Y^bfjnrvz~%)-

B:    24219.1912,  Layer 4 to 5  Message = =fi~6Lb=xEZp(=3i~6Lb

A:    24547.9450,  Layer 5 to 4  Message = dt6Vv8Xx:Tz<2|>_~Aa#

A:    25473.5765,  Layer 5 to 4  Message = U)Z.`3e8j=UCtHyM~R&W

B:    25818.2077,  Layer 4 to 5  Message = dfxV}Gn7>(Ov2g0W~Ho8

B:    25875.2914,  Layer 4 to 5  Message = ?xS.gBzU0?D|W2kF~Y4m

A:    26173.7727,  Layer 5 to 4  Message = V;~dI.qV;~dV.qV;~dI.

A:    27016.1821,  Layer 5 to 4  Message = WNE;2)}tkbXOW<3*~ulc

B:    27154.1549,  Layer 4 to 5  Message = A-wdP<)s`LA%o[H4~kWD

A:    27303.5880,  Layer 5 to 4  Message = Xaiqy$,4<EMU^Xnv~)19

B:    27578.2169,  Layer 4 to 5  Message = B?=;97531x-B)'%#~|zx


Printing the contents of the Simulation Event Q

Event Time = 27664.834 A: Timer

Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q

Event Time = 27938.457 A: LAYER 5
```

```
Printing the contents of the Simulation Event Q
Event Time = 27786.324 A: Timer
Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 27786.324 A: Timer
Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 27928.812 A: Timer
Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 27928.812 A: Timer
Event Time = 27938.457 A: LAYER 5




Printing the contents of the Simulation Event Q
Event Time = 27938.457 A: LAYER 5
Event Time = 27957.167 A: Timer


B:    27863.6014,   Layer 4 to 5   Message = CRbq#2BQap!1CP`o~0?O
A:    27938.4573,   Layer 5 to 4   Message = YfxIc|8Rl(B[u1Ye~:Tn
A:    28391.3654,   Layer 5 to 4   Message = Z(S~LwEp=i6bxZ(Z~LwE
B:    29011.8521,   Layer 4 to 5   Message = De(Ij-No2St7XD<^~Bc&
A:    29101.5228,   Layer 5 to 4   Message = d:wV5rQ0mL+h2&cB[^<y
A:    29144.0261,   Layer 5 to 4   Message = ]M=.|m^N>x}n_O?0~]`P
A:    29992.9360,   Layer 5 to 4   Message = ^`bdfhjlnprtvxz|~#^'
A:    30521.8566,   Layer 5 to 4   Message = _r(;Ocv,?Sgz0DWk~4H_
```

```
A:    30903.9471,   Layer 5 to 4   Message = `'Lq8^%Jo6[#Hm4Y~Fk2

A:    31455.7627,   Layer 5 to 4   Message = aapI!X1hAwP)`8oH~W0g

B:    31578.5622,   Layer 4 to 5   Message = EwL~S(Zxb6i=pEEL~S(Z

A:    31736.4992,   Layer 5 to 4   Message = bLb~iS=(pZExwbL6~iS=

B:    31823.0535,   Layer 4 to 5   Message = d,pV<#gM3w^D2nTF~eK1

B:    32483.0482,   Layer 4 to 5   Message = Gf6.&{skcZRJB93)Gvnf

A:    32490.5713,   Layer 5 to 4   Message = dfZcRNJFB=952-3%~zvr

A:    32737.6318,   Layer 5 to 4   Message = dq~.dIVdq~.;IVdq~.;I

A:    33667.8068,   Layer 5 to 4   Message = e&Ed%ec$Cb#Ba!A`~?_}

A:    34005.1134,   Layer 5 to 4   Message = f8i;l>fBrEuHxK{N~Q$T

B:    34143.6601,   Layer 4 to 5   Message = HQZdmv!+4=GPYclu~H3<

B:    34207.2963,   Layer 4 to 5   Message = Id~;Vq.Id~;Vq.Id~;Iq

A:    34548.5239,   Layer 5 to 4   Message = gKxqU9{gD(jN2tX<~cG+

B:    35057.0275,   Layer 4 to 5   Message = JvEq?l:g5b0]+W&R~MyJ

A:    35115.6191,   Layer 5 to 4   Message = h^SI>4*}hi_TJ?5+~tj`

A:    35229.4276,   Layer 5 to 4   Message = ipw~(x6=EiSZbipw~(x6

A:    35639.5352,   Layer 5 to 4   Message = d%=Vo*C[txja24Mf~9Rk

B:    35838.7016,   Layer 4 to 5   Message = K+iI)gG'eE%cC#aA~_>|

B:    35956.3235,   Layer 4 to 5   Message = LLx~pbSE6(wiZL=x~pbS

A:    35980.8289,   Layer 5 to 4   Message = k7b.X%OyFp<k3^*T~KuB

A:    36664.1963,   Layer 5 to 4   Message = lf(dB}[9uS1ml)3C~]:v

A:    37116.8143,   Layer 5 to 4   Message = m]L;+xhWG6&scmB1~n^M

B:    37223.2166,   Layer 4 to 5   Message = dPMVY]`cfilo2ux{~$'*

A:    37666.4476,   Layer 5 to 4   Message = nopqrstuvwxyz{n}~!#$

A:    38453.3824,   Layer 5 to 4   Message = o$6I[n#5HZm!4GYo~3FX

B:    38879.9090,   Layer 4 to 5   Message = NcwNCWl#7Lau,AUj~5J_

A:    39139.9078,   Layer 5 to 4   Message = p6Z~EixSw=b(Lp6ZpEix

B:    39540.1498,   Layer 4 to 5   Message = Ou=dORxAgxU{Dj2X~Gm5

B:    39586.8518,   Layer 4 to 5   Message = Pfb;sP'_8pJ$[53G~X2j

B:    39591.8436,   Layer 4 to 5   Message = Q<(q]HQ|hS>*s_J5~jUA

B:    39637.9024,   Layer 4 to 5   Message = ROLIFC?R9630-*'$~{xu

B:    39974.7568,   Layer 4 to 5   Message = Sbp~x=LZSw(6ESbp~x=L

B:    40003.1940,   Layer 4 to 5   Message = dt6Vv8Xx:Tz<2|>_~Aa#

A:    40066.3650,   Layer 5 to 4   Message = dI~V.d;qI~V.2;qI~q.d

A:    40282.6329,   Layer 5 to 4   Message = r[E.u_H1xbK4{eN7~hr:

B:    40322.7534,   Layer 4 to 5   Message = U)Z.`3e8j=UCtHyM~R&W
```

```
A:    40559.6545,    Layer 5 to 4    Message = snid_YTOJE?:50+&~yts

B:    40652.6170,    Layer 4 to 5    Message = V;~dI.qV;~dV.qV;~dI.

B:    40887.0778,    Layer 4 to 5    Message = WNE;2)}tkbXOW<3*~ulc

A:    40928.4855,    Layer 5 to 4    Message = t#x;HTamy(4AMYfr~-9F

A:    41451.0960,    Layer 5 to 4    Message = uuSq1Om-Ki)Ge%3a~>]z

A:    42357.2319,    Layer 5 to 4    Message = vHvIxJyKzL{M|N}O~P!Q

A:    42460.7779,    Layer 5 to 4    Message = wZ=wbE(iLxpS6wZ=~bE(

A:    42549.2167,    Layer 5 to 4    Message = dmbVx?4){peY2C7,~sh]

B:    42656.4908,    Layer 4 to 5    Message = Xaiqy$,4<EMU^Xnv~)19

A:    42760.4168,    Layer 5 to 4    Message = y!(.4yAGMSY`flrx~'-3

A:    43490.4728,    Layer 5 to 4    Message = z4Ld{5ze|6Nf}7Og~8Ph

A:    44360.1136,    Layer 5 to 4    Message = {Gp;e0Y{NwCl7a,U~Js>

A:    44516.1513,    Layer 5 to 4    Message = |Y6qN+fC|Z7rO,gD~[8s

B:    44580.4555,    Layer 4 to 5    Message = YfxIc|8Rl(B[u1Ye~:Tn

B:    44628.9607,    Layer 4 to 5    Message = Z(S~LwEp=i6bxZ(Z~LwE

B:    44781.9339,    Layer 4 to 5    Message = d:wV5rQ0mL+h2&cB[^<y

B:    45223.1572,    Layer 4 to 5    Message = ]M=.|m^N>x}n_O?0~]`P

A:    45304.0291,    Layer 5 to 4    Message = }lZI7&raO},xgUD2~m[J

B:    45436.8132,    Layer 4 to 5    Message = ^`bdfhjlnprtvxz|~#^'

A:    45822.1539,    Layer 5 to 4    Message = ~fDUgx,=Oa~&7I3l}1CT

B:    45883.8424,    Layer 4 to 5    Message = _r(;Ocv,?Sgz0DWk~4H_

B:    45914.6982,    Layer 4 to 5    Message = `'Lq8^%Jo6[#Hm4Y~Fk2

B:    46166.6126,    Layer 4 to 5    Message = aapI!X1hAwP)`8oH~W0g

A:    46329.6020,    Layer 5 to 4    Message = !3EVhy->Pbs'2J[m~2DU

A:    46390.4418,    Layer 5 to 4    Message = ##i.Qt9]!Eh-Ps8[~Dg,

A:    46920.8623,    Layer 5 to 4    Message = $X$d:oFzQ(]3h>sJ~U,a

B:    47104.4986,    Layer 4 to 5    Message = bLb~iS=(pZExwbL6~iS=

A:    47744.3247,    Layer 5 to 4    Message = %kS%$jR:#iQ9!hP8~gO7

A:    48369.5621,    Layer 5 to 4    Message = &}wq&e_XRLF?93-'~xrl

A:    48677.2448,    Layer 5 to 4    Message = '2=IT'kv$x:FQ]hs~,7C

A:    48683.2411,    Layer 5 to 4    Message = (Eb~=Z(6SpxLi(Eb~=Zw

A:    49461.8719,    Layer 5 to 4    Message = dW(V'U&)%S$R2Q!P~O}N

A:    49579.7374,    Layer 5 to 4    Message = *fL.nP2r*6vX:z3>~aC%

B:    49818.3882,    Layer 4 to 5    Message = dfZcRNJFB=952-3%~zvr

A:    49907.2891,    Layer 5 to 4    Message = +|pdWK>2&+k_RF9-~rfY

B:    50233.2276,    Layer 4 to 5    Message = dq~.dIVdq~.;IVdq~.;I
```

Printing the contents of the Simulation Event Q

Event Time = 50281.639 A: LAYER 5

Event Time = 50328.877 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 50281.639 A: LAYER 5

Event Time = 50344.206 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 50344.206 A: Timer

A: 50281.6385, Layer 5 to 4 Message = ,16;AFKPUZ,ejoty~&+0

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 50744.206 A: Timer

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 50744.206 A: Timer

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 51031.290 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 50967.279 A: Timer

Event Time = 51031.290 A: LAYER 5

B: 50882.7541,   Layer 4 to 5   Message = e&Ed%ec$Cb#Ba!A`~?_}

B: 50894.9935,   Layer 4 to 5   Message = f8i;l>fBrEuHxK{N~Q$T

B: 51024.1564,   Layer 4 to 5   Message = gKxqU9{gD(jN2tX<~cG+

A: 51031.2897,   Layer 5 to 4   Message = -DZq*AWn'=T-$:Qh~7Ne

B: 51067.5042,   Layer 4 to 5   Message = h^SI>4*}hi_TJ?5+~tj`

A: 51678.3966,   Layer 5 to 4   Message = .V~Iq;d.V~Iq.d.V~Iq;

A: 51764.0221,   Layer 5 to 4   Message = xiE~Z6pL(b=wSxiE~Z6p

B: 51994.2685,   Layer 4 to 5   Message = ipw~(x6=EiSZbipw~(x6

B: 52888.4880,   Layer 4 to 5   Message = d%=Vo*C[txja24Mf~9Rk

B: 53323.3326,   Layer 4 to 5   Message = k7b.X%OyFp<k3^*T~KuB

B: 54365.7987,   Layer 4 to 5   Message = lf(dB}[9uS1ml)3C~]:v

B: 55142.7213,   Layer 4 to 5   Message = m]L;+xhWG6&scmB1~n^M

B: 55670.8619,   Layer 4 to 5   Message = nopqrstuvwxyz{n}~!#$

B: 55929.1335,   Layer 4 to 5   Message = o$6I[n#5HZm!4GYo~3FX

B: 56532.9203,   Layer 4 to 5   Message = p6Z~EixSw=b(Lp6ZpEix

B: 57799.6458,   Layer 4 to 5   Message = dI~V.d;qI~V.2;qI~q.d

B: 59798.1038,   Layer 4 to 5   Message = r[E.u_H1xbK4{eN7~hr:

B: 59934.8898,   Layer 4 to 5   Message = snid_YTOJE?:50+&~yts

```
B:    59942.0086,  Layer 4 to 5  Message = t#x;HTamy(4AMYfr~-9F

B:    60585.5204,  Layer 4 to 5  Message = uuSq1Om-Ki)Ge%3a~>]z

B:    60718.8563,  Layer 4 to 5  Message = vHvIxJyKzL{M|N}O~P!Q

B:    61561.5686,  Layer 4 to 5  Message = wZ=wbE(iLxpS6wZ=~bE(

B:    61577.1933,  Layer 4 to 5  Message = dmbVx?4){peY2C7,~sh]

B:    62547.4567,  Layer 4 to 5  Message = y!(.4yAGMSY`flrx~'-3

B:    63881.8873,  Layer 4 to 5  Message = z4Ld{5ze|6Nf}7Og~8Ph

B:    64093.4413,  Layer 4 to 5  Message = {Gp;e0Y{NwCl7a,U~Js>

B:    64582.8782,  Layer 4 to 5  Message = |Y6qN+fC|Z7rO,gD~[8s

B:    64708.5156,  Layer 4 to 5  Message = }lZI7&raO},xgUD2~m[J

B:    66802.5413,  Layer 4 to 5  Message = ~fDUgx,=Oa~&7I3l}1CT

B:    67260.0663,  Layer 4 to 5  Message = !3EVhy->Pbs'2J[m~2DU

B:    67458.1342,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:    67731.2279,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

B:    68697.8857,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

B:    69004.9843,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl

B:    69671.4453,  Layer 4 to 5  Message = '2=IT'kv$x:FQ]hs~,7C

B:    69880.9509,  Layer 4 to 5  Message = (Eb~=Z(6SpxLi(Eb~=Zw
```

Printing the contents of the Simulation Event Q

Event Time = 69978.694 A: Timer

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Event Time = 70108.306 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 70108.306 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 70148.709 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 70148.709 A: Timer

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Event Time = 70274.227 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 70274.227 A: Timer

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Printing the contents of the Simulation Event Q

Event Time = 70688.943 A: Timer

B: 70598.7179,   Layer 4 to 5   Message = dW(V'U&)%S$R2Q!P~O}N

B: 71116.2365,   Layer 4 to 5   Message = *fL.nP2r*6vX:z3>~aC%

```
Simulator terminated at time 71207.773597
 after receiving 100 msgs at layer5
Simulator Analysis:
  Number of messages sent from 5 to 4: 104
  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: 1343
  Average number of packets already in network:     0.000
  Number of packets that the network lost: 644
  Number of packets that the network corrupted: 346
  Number of packets that the network put out of order: 358
```

5. Bi-directional communication with medium packet loss, corruption, and out-of-order probabilities

      Number of Messages: 100

      Lost Packet Prob.: 0.5

      Corrupt Packet Prob.: 0.5

      Out Of Order Prob.: 0.5

      Ave. time between messages: 1000

      Trace level: 1

      Randomize: 1

      Bi-directional: 1

```
B:      485.6228,   Layer 5 to 4   Message = !fEVhy->Pbs'2J3m~2DU

A:      514.5812,   Layer 5 to 4   Message = !fEVhy->Pbs'2J3m~2DU

B:      527.4664,   Layer 4 to 5   Message = !fEVhy->Pbs'2J3m~2DU

B:     1763.9086,   Layer 5 to 4   Message = ##.c9nEyP'[2g=rI}T+`

B:     2958.3636,   Layer 5 to 4   Message = ${$oic]VPJD=71+%|vpj

B:     3128.8817,   Layer 5 to 4   Message = %B_%:Wt3Pm,If%B_{:Wt

B:     4986.4308,   Layer 5 to 4   Message = &fH*&L.nP2rT6vX:z]>~

A:     6205.4818,   Layer 5 to 4   Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:     6609.2027,   Layer 4 to 5   Message = ##i.Qt9]!Eh-Ps8[~Dg,

B:     8104.5431,   Layer 5 to 4   Message = ',16;'FKPUZ`ejoty~&+

B:    10000.7664,   Layer 5 to 4   Message = (PxCk5((PxCk5^(PxCk5

B:    10006.5898,   Layer 5 to 4   Message = dtbO<*u)P=+v2Q>,weR?

A:    11445.4058,   Layer 5 to 4   Message = $X$d:oFzQ(]3h>sJ~U,a

B:    11704.8937,   Layer 4 to 5   Message = $X$d:oFzQ(]3h>sJ~U,a

B:    13271.8822,   Layer 5 to 4   Message = *:K[l|x?*aq$4EUfv)9J

A:    14796.8778,   Layer 5 to 4   Message = %kS%$jR:#iQ9!hP8~gO7

A:    15106.2910,   Layer 5 to 4   Message = &}wq&e_XRLF?93-'~xrl

B:    15113.4191,   Layer 4 to 5   Message = %kS%$jR:#iQ9!hP8~gO7

B:    15633.9961,   Layer 4 to 5   Message = &}wq&e_XRLF?93-'~xrl

A:    16457.5586,   Layer 5 to 4   Message = '2=IT'kv$x:FQ]hs~,7C

B:    16658.5990,   Layer 4 to 5   Message = '2=IT'kv$x:FQ]hs~,7C

A:    17670.1498,   Layer 5 to 4   Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:    17676.2815,   Layer 4 to 5   Message = (Eb~=Z(6SpxLi(Eb~=Zw

B:    18885.6791,   Layer 5 to 4   Message = +f4h=qGzP+Yxc83BuK~T
```

```
B:    20095.6147,   Layer 5 to 4   Message = ,%{tmf_WPI,:3,%{tmf_

A:    21854.7752,   Layer 5 to 4   Message = dW(V'U&)%S$R2Q!P~O}N

B:    21989.2694,   Layer 4 to 5   Message = dW(V'U&)%S$R2Q!P~O}N

B:    22892.6329,   Layer 5 to 4   Message = -Ie#>Zv4Pl*-b};Ws1Mi

B:    23240.1857,   Layer 5 to 4   Message = .mNxnO0oP1pQ.qR3rS4s

B:    25057.6046,   Layer 5 to 4   Message = x37;?DHLPTX]aximquy}

A:    26601.5100,   Layer 5 to 4   Message = *jL.nP2r*6vX:z]>~aC%

B:    26710.2775,   Layer 4 to 5   Message = *jL.nP2r*6vX:z]>~aC%

B:    27608.5376,   Layer 5 to 4   Message = dW~Ho8`)PwAh2X0Ip9a*

A:    28237.0014,   Layer 5 to 4   Message = +fpdWK>2&+k_RF3-~rfY

B:    28360.5886,   Layer 4 to 5   Message = +fpdWK>2&+k_RF3-~rfY

B:    29992.0888,   Layer 5 to 4   Message = 1{hTA-wdP<)s`L81o[H4

A:    30166.7157,   Layer 5 to 4   Message = ,16;AFKPUZ,ejoty~&+0

A:    30262.3230,   Layer 5 to 4   Message = -DZq*AWn'=T-$:Qh~7Ne

B:    30288.9382,   Layer 4 to 5   Message = ,16;AFKPUZ,ejoty~&+0

B:    30700.8286,   Layer 5 to 4   Message = 2BQap!1AP`o~0?O_2}x>

B:    31001.3705,   Layer 4 to 5   Message = -DZq*AWn'=T-$:Qh~7Ne

A:    32207.0113,   Layer 5 to 4   Message = .V~Iq;d.V~Iq.d.V~Iq;

B:    32543.3693,   Layer 4 to 5   Message = .V~Iq;d.V~Iq.d.V~Iq;

B:    34177.1060,   Layer 5 to 4   Message = 3f:mBtI{P%W,_3f:m3tI

A:    34474.9616,   Layer 5 to 4   Message = xiE~Z6pL(b=wSxiE~Z6p

B:    34782.2815,   Layer 4 to 5   Message = xiE~Z6pL(b=wSxiE~Z6p

B:    36446.0195,   Layer 5 to 4   Message = 4f$yqiaXPH?7x'3tld4S

B:    36979.5631,   Layer 5 to 4   Message = 5Pk(C^x5Pk(C^x5Pk(C5

B:    38510.0581,   Layer 5 to 4   Message = 6tT4rR2pP0nN.lL,jJ*h

A:    38531.5010,   Layer 5 to 4   Message = d{iVD1|jWE2}2X03~lYG

B:    38684.2760,   Layer 4 to 5   Message = d{iVD1|jWE2}2X03~lYG

B:    39801.3065,   Layer 5 to 4   Message = d7=ADGJMPSVY2`cfilor

A:    41325.2268,   Layer 5 to 4   Message = 10x.-,+*)('&%$#1~}|{

B:    41529.1559,   Layer 4 to 5   Message = 10x.-,+*)('&%$#1~}|{

B:    41785.0330,   Layer 5 to 4   Message = 8_8Ms;b*Pv>e-SyBh0V|

B:    43172.6379,   Layer 5 to 4   Message = 9%n9E0yeP;'p[G2{gR=)

B:    44576.9013,   Layer 5 to 4   Message = :IWf:%3BP_m{,:IWft%3

B:    45445.5647,   Layer 5 to 4   Message = ;mArF;K|P$U)Z.`3e8j=

A:    47042.0607,   Layer 5 to 4   Message = 2CSdt'7HXiy,<M^n21BR

B:    47243.2941,   Layer 4 to 5   Message = 2CSdt'7HXiy,<M^n21BR
```

```
B:    48477.6122,   Layer 5 to 4   Message = <3*~ul<YPG=4+!vmdZQH

A:    49408.4638,   Layer 5 to 4   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:    49719.1126,   Layer 4 to 5   Message = 3Uw;^!Df*Ln2Tv:]~3e)

B:    50112.7927,   Layer 5 to 4   Message = =fq-Gaz=Pj&?Ys3Ic|8R

B:    51538.9579,   Layer 5 to 4   Message = d{Z9vU4q>xlK2gF%bA}]

B:    52363.4879,   Layer 5 to 4   Message = ?BDFHJLNP?TVXZ]_aceg

B:    53552.4911,   Layer 5 to 4   Message = Af-Rw>d+PuAb)Ns:`'Lq

B:    54656.1608,   Layer 5 to 4   Message = B,t_I3{fP:%BWB,t_I3{

A:    55025.7876,   Layer 5 to 4   Message = 4f=qGzP&Yxc8lB3K~T4^

B:    55243.9892,   Layer 4 to 5   Message = 4f=qGzP&Yxc8lB3K~T4^

B:    56275.7183,   Layer 5 to 4   Message = CP^kx(5CP^kxC5CP^kx(

A:    58018.8251,   Layer 5 to 4   Message = 5zbI0u]D+pW>&kR9~fM5

B:    58224.6181,   Layer 4 to 5   Message = 5zbI0u]D+pW>&kR9~fM5

A:    58231.9937,   Layer 5 to 4   Message = 6x(~wpibZSLE=6x(~wpi

A:    59493.7574,   Layer 5 to 4   Message = d7LVaku!,6AK2`jt~+5?

B:    59613.8863,   Layer 4 to 5   Message = 6x(~wpibZSLE=6x(~wpi

A:    60531.5691,   Layer 5 to 4   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

B:    61127.4569,   Layer 4 to 5   Message = d7LVaku!,6AK2`jt~+5?

A:    62040.7546,   Layer 5 to 4   Message = 9g693a0^-Z*W'T$Q~N{K

B:    62508.2011,   Layer 4 to 5   Message = 8T8.Jf$?[w5Qm+Gc~<Xt

B:    62741.8261,   Layer 4 to 5   Message = 9g693a0^-Z*W'T$Q~N{K

B:    63543.9084,   Layer 5 to 4   Message = DtGwJzM}P#S&VDY,]x`2

A:    64764.5113,   Layer 5 to 4   Message = :yZ;:[<{]=|^>}_?~`A!

B:    64881.8280,   Layer 4 to 5   Message = :yZ;:[<{]=|^>}_?~`A!

B:    65230.3575,   Layer 5 to 4   Message = E:0&yoeZPF;1'zEf[QG<

B:    66230.0362,   Layer 5 to 4   Message = d_w2Kd|7Pi$<2n)FZs.G

A:    67044.8682,   Layer 5 to 4   Message = ;.~qd;I;.~qdVI;.~qdV

B:    67074.2252,   Layer 4 to 5   Message = ;.~qd;I;.~qdVI;.~qdV

A:    67158.0895,   Layer 5 to 4   Message = <AEIMQ<Y^bfjnrvz~%)-

B:    67795.3698,   Layer 4 to 5   Message = <AEIMQ<Y^bfjnrvz~%)-

A:    67988.6958,   Layer 5 to 4   Message = =fi~6Lb=xEZp(=3i~6Lb

B:    68115.7041,   Layer 4 to 5   Message = =fi~6Lb=xEZp(=3i~6Lb

A:    68458.8876,   Layer 5 to 4   Message = dfxV}Gn7>(Ov2g0W~Ho8

B:    68668.6392,   Layer 4 to 5   Message = dfxV}Gn7>(Ov2g0W~Ho8

B:    70126.6375,   Layer 5 to 4   Message = Gfa>zX6rP.jH&b3{G7sQ

A:    70599.5932,   Layer 5 to 4   Message = ?xS.gBzU0?D|W2kF~Y4m
```

```
B:    71010.0060,  Layer 4 to 5  Message = ?xS.gBzU0?D|W2kF~Y4m

A:    72577.3429,  Layer 5 to 4  Message = A-wdP<)s`LA%o[H4~kWD

B:    72804.8443,  Layer 4 to 5  Message = A-wdP<)s`LA%o[H4~kWD

A:    74249.8805,  Layer 5 to 4  Message = B?=;97531x-B)'%#~|zx

B:    74452.9045,  Layer 4 to 5  Message = B?=;97531x-B)'%#~|zx
```

Printing the contents of the Simulation Event Q

Event Time = 74549.880 A: Timer

Event Time = 76105.407 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 74557.290 A: Timer

Event Time = 76105.407 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 74557.290 A: Timer

Event Time = 76105.407 B: LAYER 5

Printing the contents of the Simulation Event Q

```
B:    76105.4074,  Layer 5 to 4  Message = HIJKLMNOPQRSTUVWXHZ[
```

Printing the contents of the Simulation Event Q

```
B:    76538.0711,  Layer 5 to 4  Message = Im3W{Bf,Pt:_%Im3W{If
```

Printing the contents of the Simulation Event Q

```
B:    77776.2372,  Layer 5 to 4  Message = J3zdM6}gP9#jS<&mV?)J
```

Printing the contents of the Simulation Event Q

```
B:    79329.8389,  Layer 5 to 4  Message = KWdp|+7DP]iu$0<IUbnz
```

Printing the contents of the Simulation Event Q

A: 79502.6749, Layer 5 to 4 Message = CRbq#2BQap!1CP`o~0?O

Printing the contents of the Simulation Event Q

Event Time = 79902.096 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 79702.675 A: Timer

Event Time = 79902.096 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 79902.096 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 79902.096 B: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 79902.096 B: LAYER 5

Event Time = 79902.675 A: Timer

Printing the contents of the Simulation Event Q

Event Time = 79902.675 A: Timer

B: 79902.0955, Layer 5 to 4 Message = LLM|N}O~P!Q#R$S%T&U'

Printing the contents of the Simulation Event Q

Event Time = 81874.544 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 80002.675 A: Timer

Eve7nt Time = 81874.544 A: LAYER 5


```
B:    79928.3983,   Layer 4 to 5   Message = CRbq#2BQap!1CP`o~0?O

A:    81874.5442,   Layer 5 to 4   Message = De(Ij-No2St7XD<^~Bc&

B:    81879.1533,   Layer 4 to 5   Message = De(Ij-No2St7XD<^~Bc&

A:    83522.0050,   Layer 5 to 4   Message = EwL~S(Zxb6i=pEEL~S(Z

B:    83829.4215,   Layer 4 to 5   Message = EwL~S(Zxb6i=pEEL~S(Z

A:    84565.7924,   Layer 5 to 4   Message = d,pV<#gM3w^D2nTF~eK1

B:    84802.5996,   Layer 4 to 5   Message = d,pV<#gM3w^D2nTF~eK1

A:    86072.4718,   Layer 5 to 4   Message = Gf6.&{skcZRJB93)Gvnf

B:    86095.5786,   Layer 4 to 5   Message = Gf6.&{skcZRJB93)Gvnf

A:    86408.0497,   Layer 5 to 4   Message = HQZdmv!+4=GPYclu~H3<

B:    86651.9554,   Layer 4 to 5   Message = HQZdmv!+4=GPYclu~H3<

B:    86906.3912,   Layer 5 to 4   Message = dBM+}rg[PE9.2uj_SH<1

B:    87310.3695,   Layer 5 to 4   Message = Nf}NOg~8Ph!9Qi#:Rj$;

A:    87850.5303,   Layer 5 to 4   Message = Id~;Vq.Id~;Vq.Id~;Iq

B:    87923.1189,   Layer 4 to 5   Message = Id~;Vq.Id~;Vq.Id~;Iq

B:    88130.3821,   Layer 5 to 4   Message = O,gDO[8sP-hE!]9tQ.iF

B:    88134.1612,   Layer 5 to 4   Message = Pfs'8P[m~2DUgx3=Oar&

B:    89833.6795,   Layer 5 to 4   Message = Qt9]!EQ-Ps8[~Dg,Or7Z

B:    90303.4352,   Layer 5 to 4   Message = R:#iQ9!RP8~gO7}fN6|e

B:    90816.5304,   Layer 5 to 4   Message = S_ju#.9ES[gr}+6BMXdo

A:    92280.6190,   Layer 5 to 4   Message = JvEq?l:g5b0]+W&R~MyJ

B:    92550.4277,   Layer 4 to 5   Message = JvEq?l:g5b0]+W&R~MyJ

A:    93195.7644,   Layer 5 to 4   Message = K+iI)gG'eE%cC#aA~_>|

B:    93305.0989,   Layer 4 to 5   Message = K+iI)gG'eE%cC#aA~_>|

A:    95123.8929,   Layer 5 to 4   Message = LLx~pbSE6(wiZL=x~pbS

A:    95367.1539,   Layer 5 to 4   Message = dPMVY]`cfilo2ux{~$'*

B:    96263.9413,   Layer 4 to 5   Message = LLx~pbSE6(wiZL=x~pbS

A:    96288.2179,   Layer 5 to 4   Message = NcwNCWl#7Lau,AUj~5J_

A:    96562.6778,   Layer 5 to 4   Message = Ou=dORxAgxU{Dj2X~Gm5

B:    96981.2600,   Layer 4 to 5   Message = dPMVY]`cfilo2ux{~$'*

B:    97442.5992,   Layer 4 to 5   Message = NcwNCWl#7Lau,AUj~5J_

B:    97995.5979,   Layer 5 to 4   Message = d%S$R#Q!PTO}2|M{LzKy
```

```
A:   98858.8177,  Layer 5 to 4  Message = Pfb;sP'_8pJ$[53G~X2j

B:   99273.1383,  Layer 5 to 4  Message = UI<0$ui]PDU+|pdWK>2&

B:   99551.8767,  Layer 4 to 5  Message = Ou=dORxAgxU{Dj2X~Gm5

B:  100592.7525,  Layer 4 to 5  Message = Pfb;sP'_8pJ$[53G~X2j

A:  101178.5590,  Layer 5 to 4  Message = Q<(q]HQ|hS>*s_J5~jUA

B:  101194.5490,  Layer 4 to 5  Message = Q<(q]HQ|hS>*s_J5~jUA

A:  102689.0522,  Layer 5 to 4  Message = ROLIFC?R9630-*'$~{xu

B:  103125.8462,  Layer 5 to 4  Message = Vm&<Sj#9Pg}VMdz3Jaw0

B:  103390.2413,  Layer 4 to 5  Message = ROLIFC?R9630-*'$~{xu

A:  103470.2530,  Layer 5 to 4  Message = Sbp~x=LZSw(6ESbp~x=L

B:  104618.5574,  Layer 5 to 4  Message = W3mI%_:tP,fBWW3mI%_:

A:  104702.0099,  Layer 5 to 4  Message = dt6Vv8Xx:Tz<2|>_~Aa#

B:  105158.4694,  Layer 4 to 5  Message = Sbp~x=LZSw(6ESbp~x=L

B:  105169.5417,  Layer 5 to 4  Message = XWVUTSRQPONMLXJIHGFE

A:  106024.2289,  Layer 5 to 4  Message = U)Z.`3e8j=UCtHyM~R&W

B:  106766.3246,  Layer 4 to 5  Message = dt6Vv8Xx:Tz<2|>_~Aa#

B:  107186.5426,  Layer 4 to 5  Message = U)Z.`3e8j=UCtHyM~R&W
```

```
Simulator terminated at time 108554.500379
 after receiving 51 msgs at layer5
Simulator Analysis:
  Number of messages sent from 5 to 4: 104
  Number of messages received at Layer 5, side A: 0
  Number of messages received at Layer 5, side B: 51
  Number of messages incorrectly received at layer 5: 0
  Number of packets entering the network: 770
  Average number of packets already in network:    0.000
  Number of packets that the network lost: 381
  Number of packets that the network corrupted: 201
  Number of packets that the network put out of order: 185
```