---- Network Simulator Version 2.3 -----

Input parameters:

Number of Messages = 100 Lost Packet Prob. = 0.100 Corrupt Packet Prob. = 0.100 Out Of Order Prob. = 0.100 Ave. time between messages = 1000.00 Trace level = 1 Randomize = 1 Bi-directional = 0

- A: 366.8289, Layer 5 to 4 Message = !fEVhy->Pbs'2J3m~2DU
- B: 394.3801, Layer 4 to 5 Message = !fEVhy->Pbs'2J3m~2DU
- A: 1659.5564, Layer 5 to 4 Message = ##i.Qt9]!Eh-Ps8[~Dg,
- B: 1660.6893, Layer 4 to 5 Message = ##i.Qt9]!Eh-Ps8[~Dg,
- A: 2943.8121, Layer 5 to 4 Message = \$X\$d:oFzQ(]3h>sJ~U,a
- B: 2969.5693, Layer 4 to 5 Message = X\$d:oFzQ(]3h>sJ~U,a
- A: 4926.4486, Layer 5 to 4 Message = %kS%\$jR:#iQ9!hP8~gO7
- B: 4951.8645, Layer 4 to 5 Message = %kS%\$jR:#iQ9!hP8~gO7
- A: 6173.5665, Layer 5 to 4 Message = &\}wq&e_XRLF?93-'~xrl
- B: 6183.3890, Layer 4 to 5 Message = &\wg&e XRLF?93-'~xrl
- A: 7028.8219, Layer 5 to 4 Message = '2=IT'kv\$x:FQ]hs~,7C
- B: 7051.0098, Layer 4 to 5 Message = '2=IT'kv\$x:FQ]hs~,7C
- A: 7555.4063, Layer 5 to 4 Message = (Eb~=Z(6SpxLi(Eb~=Zw
- B: 7595.2950, Layer 4 to 5 Message = (Eb~=Z(6SpxLi(Eb~=Zw
- A: 9136.8653, Layer 5 to 4 Message = dW(V'U&)%S\$R2Q!P~O}N
- B: 9143.6966, Layer 4 to 5 Message = $dW(V'U\&)\%SR2Q!P\simON$
- A: 11093.2155, Layer 5 to 4 Message = *jL.nP2r*6vX:z]>~aC%
- B: 11097.9687, Layer 4 to 5 Message = *jL.nP2r*6vX:z]>~aC%

- A: 11130.6866, Layer 5 to 4 Message = +fpdWK>2&+k_RF3-~rfY
- B: 11156.5275, Layer 4 to 5 Message = +fpdWK>2&+k_RF3-~rfY
- A: 12155.9056, Layer 5 to 4 Message = ,16;AFKPUZ,ejoty~&+0
- B: 12159.4608, Layer 4 to 5 Message = ,16;AFKPUZ,ejoty~&+0
- A: 13192.0421, Layer 5 to 4 Message = -DZg*AWn'=T-\$:Qh~7Ne
- B: 13218.0668, Layer 4 to 5 Message = -DZq*AWn'=T-\$:Qh~7Ne
- A: 14811.5235, Layer 5 to 4 Message = $.V\sim lq;d.V\sim lq.d.V\sim lq;$
- B: 14827.2869, Layer 4 to 5 Message = $.V\sim lq;d.V\sim lq.d.V\sim lq;$
- A: 15521.1610, Layer 5 to 4 Message = xiE~Z6pL(b=wSxiE~Z6p
- B: 15525.0053, Layer 4 to 5 Message = xiE~Z6pL(b=wSxiE~Z6p
- A: 15968.5580, Layer 5 to 4 Message = d{iVD1|jWE2}2X03~IYG
- B: 15980.0050, Layer 4 to 5 Message = d{iVD1|jWE2}2X03~IYG

- A: 16323.9939, Layer 5 to 4 Message = $10x.-,+*)('\&\%$#1~]{}$
- B: 16334.6350, Layer 4 to 5 Message = $10x.-,+*)('\&\%$#1~]{}$
- A: 17159.4136, Layer 5 to 4 Message = 2CSdt'7HXiy,<M^n21BR
- B: 17167.8847, Layer 4 to 5 Message = 2CSdt'7HXiy,<M^n21BR
- A: 18616.7507, Layer 5 to 4 Message = 3Uw;^!Df*Ln2Tv:]~3e)

- B: 18634.5112, Layer 4 to 5 Message = 3Uw;^!Df*Ln2Tv:]~3e)
- A: 20198.2321, Layer 5 to 4 Message = 4f=qGzP&Yxc8lB3K~T4^
- B: 20200.9979, Layer 4 to 5 Message = 4f=qGzP&Yxc8lB3K~T4^
- A: 21008.5134, Layer 5 to 4 Message = 5zbl0u]D+pW>&kR9~fM5
- B: 21032.1153, Layer 4 to 5 Message = 5zbl0u]D+pW>&kR9~fM5
- A: 21066.8688, Layer 5 to 4 Message = 6x(~wpibZSLE=6x(~wpi
- B: 21099.8048, Layer 4 to 5 Message = 6x(~wpibZSLE=6x(~wpi
- A: 22309.2089, Layer 5 to 4 Message = d7LVaku!,6AK2`jt~+5?
- B: 22333.6184, Layer 4 to 5 Message = d7LVaku!,6AK2`jt~+5?
- A: 24287.2893, Layer 5 to 4 Message = 8T8.Jf\$?[w5Qm+Gc~<Xt
- B: 24314.6555, Layer 4 to 5 Message = 8T8.Jf\$?[w5Qm+Gc~<Xt
- A: 26262.9279, Layer 5 to 4 Message = 9g693a0^-Z*W'T\$Q~N{K
- B: 26265.1504, Layer 4 to 5 Message = 9g693a0^-Z*W'T\$Q~N{K
- A: 27618.7051, Layer 5 to 4 Message = yZ;:[$<{]=|^>} ?~`A!$
- B: 27637.2314, Layer 4 to 5 Message = $:yZ;:[<{]=|^>}_?~A!$
- A: 28860.7313, Layer 5 to 4 Message = ;.~qd;I;.~qdVI;.~qdV
- B: 28870.0354, Layer 4 to 5 Message = ;.~qd;I;.~qdVI;.~qdV
- A: 29071.6534, Layer 5 to 4 Message = <AEIMQ<Y^bfjnrvz~%)-
- B: 29083.7640, Layer 4 to 5 Message = <AEIMQ<Y^bfinrvz~%)-
- A: 29381.9816, Layer 5 to 4 Message = =fi \sim 6Lb=xEZp(=3i \sim 6Lb

B: 29398.3030, Layer 4 to 5 Message = =fi~6Lb=xEZp(=3i~6Lb

A: 29716.9340, Layer 5 to 4 Message = dfxVGn7>(Ov2g0W~Ho8

B: 29734.1999, Layer 4 to 5 Message = dfxV}Gn7>(Ov2g0W~Ho8

A: 30578.8939, Layer 5 to 4 Message = ?xS.gBzU0?D|W2kF~Y4m

B: 30596.8543, Layer 4 to 5 Message = ?xS.gBzU0?D|W2kF~Y4m

A: 31797.8120, Layer 5 to 4 Message = A-wdP<)s`LA%o[H4~kWD

B: 31822.3063, Layer 4 to 5 Message = A-wdP<)s`LA%o[H4~kWD

A: 32319.6412, Layer 5 to 4 Message = B?=;97531x-B)'%#~|zx

B: 32347.8101, Layer 4 to 5 Message = B?=;97531x-B)'%#~|zx

Printing the contents of the Simulation Event Q

Event Time = 32376.085 A: LAYER 3 Seq/Ack/Check = 1/1/83210822: ACK

Event Time = 33544.496 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 32376.085 A: LAYER 3 Seq/Ack/Check = 1/1/83210822: ACK

Event Time = 32379.641 A: Timer Event Time = 33544.496 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 32379.641 A: Timer

Event Time = 32396.096 A: LAYER 3 Seq/Ack/Check = 1/1/83210822: ACK

Event Time = 33544.496 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 33544,496 A: LAYER 5

Printing the contents of the Simulation Event Q

A: 33544.4958, Layer 5 to 4 Message = CRbq#2BQap!1CP`o~0?O

Printing the contents of the Simulation Event Q

Event Time = 33572.833 B: LAYER 3 Seq/Ack/Check = 0/0/1320439107:

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

Event Time = 35490.799 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 33576.969 B: LAYER 3 Seg/Ack/Check = 0/0/1320439107:

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

Event Time = 33584.496 A: Timer Event Time = 35490.799 A: LAYER 5

B: 33572.8332, Layer 4 to 5 Message = CRbq#2BQap!1CP`o~0?O

A: 35490.7993, Layer 5 to 4 Message = De(Ij-No2St7XD<^-Bc&

B: 35524.0945, Layer 4 to 5 Message = De(Ij-No2St7XD<^~Bc&

A: 37161.0509, Layer 5 to 4 Message = EwL \sim S(Zxb6i=pEEL \sim S(Z

B: 37207.7031, Layer 4 to 5 Message = EwL~S(Zxb6i=pEEL~S(Z

A: 37329.0843, Layer 5 to 4 Message = d,pV<#gM3w^D2nTF~eK1

B: 37334.7577, Layer 4 to 5 Message = d,pV<#gM3w^D2nTF~eK1

A: 37835.5757, Layer 5 to 4 Message = Gf6.&{skcZRJB93)Gvnf

B: 37844.3808, Layer 4 to 5 Message = Gf6.&{skcZRJB93)Gvnf

A: 39269.4725, Layer 5 to 4 Message = HQZdmv!+4=GPYclu~H3<

B: 39312.3856, Layer 4 to 5 Message = HQZdmv!+4=GPYclu~H3<

- A: 39346.9413, Layer 5 to 4 Message = Id~;Vq.Id~;Vq.Id~;Iq
- B: 39371.2810, Layer 4 to 5 Message = Id~;Vq.Id~;Vq.Id~;Iq
- A: 40065.9801, Layer 5 to 4 Message = JvEq?l:g5b0]+W&R~MyJ
- B: 40084.6703, Layer 4 to 5 Message = JvEq?l:g5b0]+W&R~MyJ
- A: 40323.5536, Layer 5 to 4 Message = K+iI)gG'eE%cC#aA~_>|
- B: 40342.9434, Layer 4 to 5 Message = K+iI)gG'eE%cC#aA~_>|
- A: 41952.7247, Layer 5 to 4 Message = LLx~pbSE6(wiZL=x~pbS
- B: 41974.2272, Layer 4 to 5 Message = LLx~pbSE6(wiZL=x~pbS
- A: 42918.2245, Layer 5 to 4 Message = dPMVY]`cfilo2ux{~\$'*
- B: 42948.4097, Layer 4 to 5 Message = dPMVY]`cfilo2ux{~\$'*
- A: 43006.8246, Layer 5 to 4 Message = NcwNCWI#7Lau,AUj~5J_
- B: 43016.6977, Layer 4 to 5 Message = NcwNCWI#7Lau,AUj~5J
- A: 44742.2327, Layer 5 to 4 Message = Ou=dORxAgxU{Dj2X~Gm5
- B: 44750.8667, Layer 4 to 5 Message = Ou=dORxAgxU{Dj2X~Gm5
- A: 44902.9069, Layer 5 to 4 Message = Pfb;sP'_8pJ\$[53G~X2]
- B: 44922.5766, Layer 4 to 5 Message = Pfb;sP'_8pJ\$[53G~X2j
- A: 45168.6050, Layer 5 to 4 Message = Q<(q]HQ|hS>*s_J5~jUA
- B: 45194.9636, Layer 4 to 5 Message = Q<(q]HQlhS>*s J5~jUA

- A: 45637.8235, Layer 5 to 4 Message = ROLIFC?R9630-*'\$~{xu
- B: 45653.5394, Layer 4 to 5 Message = ROLIFC?R9630-*'\$~{xu
- A: 46423.8303, Layer 5 to 4 Message = Sbp~x=LZSw(6ESbp~x=L
- B: 46445.8329, Layer 4 to 5 Message = Sbp~x=LZSw(6ESbp~x=L
- A: 47866.9560, Layer 5 to 4 Message = dt6Vv8Xx:Tz<2|>_~Aa#
- B: 47895.6073, Layer 4 to 5 Message = dt6Vv8Xx:Tz<2|>_~Aa#
- A: 49106.9470, Layer 5 to 4 Message = U)Z.`3e8j=UCtHyM~R&W
- B: 49186.5348, Layer 4 to 5 Message = U)Z.`3e8j=UCtHyM~R&W
- A: 49558.5723, Layer 5 to 4 Message = V;~dl.qV;~dV.qV;~dl.
- B: 49579.8798, Layer 4 to 5 Message = V;~dl.qV;~dV.qV;~dl.
- A: 50437.9163, Layer 5 to 4 Message = WNE;2)}tkbXOW<3*~ulc
- B: 50478.8845, Layer 4 to 5 Message = WNE;2)}tkbXOW<3*~ulc
- A: 51201.8344, Layer 5 to 4 Message = Xaigy\$,4<EMU^Xnv~)19
- B: 51220.3890, Layer 4 to 5 Message = Xaiqy\$,4<EMU^Xnv~)19
- A: 51975.8299, Layer 5 to 4 Message = Yfxlc|8Rl(B[u1Ye~:Tn
- B: 52002.7657, Layer 4 to 5 Message = Yfxlc|8Rl(B[u1Ye~:Tn
- A: 52770.9086, Layer 5 to 4 Message = $Z(S\sim LwEp=i6bxZ(Z\sim LwE)$
- B: 52809.5149, Layer 4 to 5 Message = $Z(S\sim LwEp=i6bxZ(Z\sim LwE$

- A: 53073.0520, Layer 5 to 4 Message = d:wV5rQ0mL+h2&cB[^<y]
- B: 53096.4661, Layer 4 to 5 Message = d:wV5rQ0mL+h2&cB[^<y
- A: 53450.9764, Layer 5 to 4 Message = $]M=.|m^N>x]n_O?0\sim]$ P
- B: 53460.0811, Layer 4 to 5 Message = [M=.|m^N>x\n O?0~]`P
- A: 53589.3073, Layer 5 to 4 Message = ^`bdfhjlnprtvxz|~#^'
- B: 53590.5955, Layer 4 to 5 Message = ^`bdfhjlnprtvxz|~#^'
- A: 53742.5169, Layer 5 to 4 Message = _r(;Ocv,?Sgz0DWk~4H_
- B: 53746.2432, Layer 4 to 5 Message = r(;Ocv,?Sgz0DWk~4H
- A: 53866.5753, Layer 5 to 4 Message = `'Lq8^%Jo6[#Hm4Y~Fk2
- B: 53868.2294, Layer 4 to 5 Message = `'Lq8^%Jo6[#Hm4Y~Fk2
- A: 54675.5650, Layer 5 to 4 Message = aapl!X1hAwP)`8oH~W0g
- B: 54699.5489, Layer 4 to 5 Message = aapl!X1hAwP)`8oH~W0g
- A: 56518.8152, Layer 5 to 4 Message = bLb~iS=(pZExwbL6~iS=
- B: 56521.8277, Layer 4 to 5 Message = bLb~iS=(pZExwbL6~iS=
- A: 58252.2505, Layer 5 to 4 Message = dfZcRNJFB=952-3%~zvr
- B: 58255.8202, Layer 4 to 5 Message = dfZcRNJFB=952-3%~zvr
- A: 58428.6566, Layer 5 to 4 Message = dg~.dlVdg~.;lVdg~.;l
- B: 58433.4174, Layer 4 to 5 Message = dq~.dlVdq~.;lVdq~.;l

Printing the contents of the Simulation Event Q Event Time = 58448.657 A: Timer

Event Time = 58758.328 A: LAYER 5

Printing the contents of the Simulation Event Q

A: 58758.3282, Layer 5 to 4 Message = e&Ed%ec\$Cb#Ba!A`~?_}

Printing the contents of the Simulation Event Q

Event Time = 58778.328 A: Timer Event Time = 59098.003 A: LAYER 5

Printing the contents of the Simulation Event Q
Event Time = 59098.003 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 58799.593 B: LAYER 3 Seg/Ack/Check = 1/1/537157698:

e&Ed%ec\$Cb#Ba!A`~? }

Event Time = 59098.003 A: LAYER 5

Printing the contents of the Simulation Event Q

Event Time = 58799.824 B: LAYER 3 Seq/Ack/Check = 1/1/537157698:

e&Ed%ec\$Cb#Ba!A`~?_}

Event Time = 58818.328 A: Timer Event Time = 59098.003 A: LAYER 5

- B: 58799.5927, Layer 4 to 5 Message = e&Ed%ec\$Cb#Ba!A`~?_}
- A: 59098.0031, Layer 5 to 4 Message = f8i;I>fBrEuHxK{N~Q\$T
- B: 59107.2645, Layer 4 to 5 Message = f8i;I>fBrEuHxK{N~Q\$T
- A: 60262.0116, Layer 5 to 4 Message = $gKxqU9\{gD(jN2tX < cG + gV)\}$
- B: 60285.7060, Layer 4 to 5 Message = gKxgU9{gD(jN2tX<~cG+
- A: 60848.6021, Layer 5 to 4 Message = h^SI>4*}hi_TJ?5+~tj`
- B: 60875.6301, Layer 4 to 5 Message = h^SI>4*}hi_TJ?5+~tj`

- A: 62201.3066, Layer 5 to 4 Message = ipw~(x6=EiSZbipw~(x6
- B: 62204.9108, Layer 4 to 5 Message = ipw~(x6=EiSZbipw~(x6
- A: 62718.2692, Layer 5 to 4 Message = d%=Vo*C[txja24Mf~9Rk
- B: 62745.0945, Layer 4 to 5 Message = d%=Vo*C[txja24Mf~9Rk
- A: 63905.1839, Layer 5 to 4 Message = $k7b.X\%OyFp < k3^*T\sim KuB$
- B: 63909.6985, Layer 4 to 5 Message = k7b.X%OyFp<k3^*T~KuB
- A: 65168.3256, Layer 5 to 4 Message = If(dB)[9uS1ml)3C~]:v
- B: 65209.3867, Layer 4 to 5 Message = If(dB)[9uS1ml)3C~]:v
- A: 66680.1962, Layer 5 to 4 Message = m]L;+xhWG6&scmB1~n^M
- B: 66709.7765, Layer 4 to 5 Message = m]L;+xhWG6&scmB1~n^M
- A: 68631.6172, Layer 5 to 4 Message = nopgrstuvwxyz{n}~!#\$
- B: 68643.3857, Layer 4 to 5 Message = nopgrstuvwxyz{n}~!#\$
- A: 69019.3903, Layer 5 to 4 Message = o\$6I[n#5HZm!4GYo~3FX
- B: 69026.5534, Layer 4 to 5 Message = o\$6I[n#5HZm!4GYo~3FX
- A: 70266.7965, Layer 5 to 4 Message = p6Z~EixSw=b(Lp6ZpEix
- B: 70270.2635, Layer 4 to 5 Message = p6Z~EixSw=b(Lp6ZpEix
- A: 70445.6168, Layer 5 to 4 Message = dl~V.d;ql~V.2;ql~q.d
- B: 70458.6277, Layer 4 to 5 Message = dl~V.d;ql~V.2;ql~q.d
- A: 71930.4503, Layer 5 to 4 Message = r[E.u_H1xbK4{eN7~hr:
- B: 71932.6458, Layer 4 to 5 Message = r[E.u H1xbK4{eN7~hr:
- A: 72869.8892, Layer 5 to 4 Message = snid_YTOJE?:50+&~yts
- B: 72895.9703, Layer 4 to 5 Message = snid YTOJE?:50+&~yts
- A: 74471.9358, Layer 5 to 4 Message = t#x;HTamy(4AMYfr~-9F

- B: 74482.2358, Layer 4 to 5 Message = t#x;HTamy(4AMYfr~-9F
- A: 75067.2772, Layer 5 to 4 Message = uuSq10m-Ki)Ge%3a~>]z
- B: 75135.7461, Layer 4 to 5 Message = uuSq1Om-Ki)Ge%3a~>|z
- A: 76653.1360, Layer 5 to 4 Message = $vHvIxJyKzL\{M|N\}O\sim P!Q$
- B: 76655.7081, Layer 4 to 5 Message = vHvIxJyKzL{M|N}O~P!Q
- A: 78278.7404, Layer 5 to 4 Message = $wZ=wbE(iLxpS6wZ=\sim bE($
- B: 78288.2255, Layer 4 to 5 Message = wZ=wbE(iLxpS6wZ=~bE(
- A: 79103.3311, Layer 5 to 4 Message = dmbVx?4){peY2C7,~sh]
- B: 79112.3894, Layer 4 to 5 Message = dmbVx?4){peY2C7,~sh}
- A: 80453.0310, Layer 5 to 4 Message = y!(.4yAGMSY`flrx~'-3
- B: 80482.2740, Layer 4 to 5 Message = y!(.4yAGMSY`flrx~'-3
- A: 80797.7529, Layer 5 to 4 Message = z4Ld{5ze|6Nf}7Og~8Ph
- B: 80816.9920, Layer 4 to 5 Message = $z4Ld{5ze|6Nf}7Og~8Ph$
- A: 82103.4963, Layer 5 to 4 Message = {Gp;e0Y{NwCl7a,U~Js>
- B: 82112.5161, Layer 4 to 5 Message = {Gp;e0Y{NwCl7a,U~Js>
- A: 82213.5430, Layer 5 to 4 Message = |Y6qN+fC|Z7rO,gD~[8s
- B: 82239.1635, Layer 4 to 5 Message = |Y6qN+fC|Z7rO,gD~[8s
- A: 82754.8569, Layer 5 to 4 Message = }IZI7&raO},xgUD2~m[J
- B: 82835.4826, Layer 4 to 5 Message = \lZI7&raO\,xgUD2~m[J

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A: 82978.9793, Layer 5 to 4 Message = ~fDUgx,=Oa~&7I3I}1CT
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- B: 85323.3896, Layer 4 to 5 Message = \$X\$d:oFzQ(]3h>sJ~U,a
- A: 86223.5321, Layer 5 to 4 Message = %kS%\$jR:#iQ9!hP8~gO7
- B: 86250.9905, Layer 4 to 5 Message = %kS%\$jR:#iQ9!hP8~gO7
- A: 86755.1322, Layer 5 to 4 Message = &\wq&e_XRLF?93-'~xrl
- B: 86757.6860, Layer 4 to 5 Message = &\wg&e XRLF?93-'~xrl
- A: 88222.9427, Layer 5 to 4 Message = '2=IT'kv\$x:FQ]hs~,7C
- B: 88240.5204, Layer 4 to 5 Message = '2=IT'kv\$x:FQ]hs~,7C
- A: 89163.3137, Layer 5 to 4 Message = (Eb~=Z(6SpxLi(Eb~=Zw
- B: 89177.1924, Layer 4 to 5 Message = (Eb~=Z(6SpxLi(Eb~=Zw

Printing the contents of the Simulation Event Q

Event Time = 89183.314 A: Timer Event Time = 90625.771 A: LAYER 5

Printing the contents of the Simulation Event Q

A: 90625.7713, Layer 5 to 4 Message = dW(V'U&)%S\$R2Q!P~O}N

Printing the contents of the Simulation Event Q

Event Time = 90645.771 A: Timer

Event Time = 91638.146 A: LAYER 5

B: 90630.2033, Layer 4 to 5 Message = dW(V'U&)%S\$R2Q!P~O}N

A: 91638.1464, Layer 5 to 4 Message = *fL.nP2r*6vX:z3>~aC%

B: 91651.8015, Layer 4 to 5 Message = *fL.nP2r*6vX:z3>~aC%

Simulator terminated at time 91658.146414 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: 476

Average number of packets already in network: 0.263

Number of packets that the network lost: 48

Number of packets that the network corrupted: 47

Number of packets that the network put out of order: 37