```
djsully@djsully:~/Desktop/project2/djsullivan_project2_ABP$ make
gcc -g project2.c student2.c -o p2
project2.c: In function 'GetTimeNow':
project2.c:485:5: warning: implicit declaration of function 'gettimeofday' [-Wimplicit-function-declaration]
     gettimeofday (&tp, NULL);
     ^
djsully@djsully:~/Desktop/project2/djsullivan_project2_ABP$ ./p2
-----  Network Simulator Version    2.3 --------

Enter the number of messages to simulate: 5
Packet loss probability [enter number between 0.0 and 1.0]: .1
Packet corruption probability [0.0 for no corruption]: .1
Packet out-of-order probability [0.0 for no out-of-order]: .1
Average time between messages from sender's layer5 [ > 0.0]: .1
Enter Level of tracing desired: 1
Do you want actions randomized: (1 = yes, 0 = no)? 0
Do you want Bidirectional: (1 = yes, 0 = no)? 0
Input parameters:
Number of Messages = 5  Lost Packet Prob. =    0.100
Corrupt Packet Prob. =   0.100  Out Of Order Prob. =    0.100
Ave. time between messages =     0.10  Trace level = 1
Randomize = 0  Bi-directional = 0


Printing the contents of the Simulation Event Q

A:       0.1080,  Layer 5 to 4  Message = !fEVhy->Pbs'2J3m~2DU

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.1205,  Layer 5 to 4  Message = ##i.Qt9]!Eh-Ps8[~Dg,

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.2893,  Layer 5 to 4  Message = $X$d:oFzQ(]3h>sJ~U,a

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.3117,  Layer 5 to 4  Message = %kS%$jR:#iQ9!hP8~gO7

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.3719,  Layer 5 to 4  Message = &}wq&e_XRLF?93-'~xrl

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.4071,  Layer 5 to 4  Message = '2=IT'kv$x:FQ]hs~,7C

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.4520,  Layer 5 to 4  Message = (Eb~=Z(6SpxLi(Eb~=Zw

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.4939,  Layer 5 to 4  Message = dW(V'U&)%S$R2Q!P~O}N

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.5830,  Layer 5 to 4  Message = *jL.nP2r*6vX:z]>~aC%

Printing the contents of the Simulation Event Q
Event Time =     8.382 B: LAYER 3  Seq/Ack/Check = 0/0/57140:  !fEVhy->Pbs'2J3m~2DU
Event Time = 1000.108 A: Timer

A:       0.7017,  Layer 5 to 4  Message = +fpdWK>2&+k_RF3-~rfY

Printing the contents of the Simulation Event Q
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Event Time = 1000.108 A: Timer

A:      0.7017,  Layer 5 to 4  Message = +fpdWK>2&+k_RF3-~rfY

Printing the contents of the Simulation Event Q
Event Time = 1000.108 A: Timer

B:      8.3822,  Layer 4 to 5  Message = !fEVhy->Pbs'2J3m~2DU

Printing the contents of the Simulation Event Q


Printing the contents of the Simulation Event Q
Event Time = 2000.108 A: Timer


Printing the contents of the Simulation Event Q


Printing the contents of the Simulation Event Q
Event Time = 3000.108 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 3000.108 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 3031.165 A: Timer

B:   2049.8704,  Layer 4 to 5  Message = ##i.Qt9]!Eh-Ps8[~Dg,

Printing the contents of the Simulation Event Q
Event Time = 3031.165 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 3071.319 A: Timer

B:   2076.9479,  Layer 4 to 5  Message = $X$d:oFzQ(]3h>sJ~U,a

Printing the contents of the Simulation Event Q
Event Time = 3071.319 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 3105.577 A: Timer

B:   2129.9477,  Layer 4 to 5  Message = %kS%$jR:#iQ9!hP8~gO7

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 = 5105.577 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 5105.577 A: Timer


Printing the contents of the Simulation Event Q
Event Time = 5111.088 A: Timer

B:   4119.6677,  Layer 4 to 5  Message = &}wq&e_XRLF?93-'~xrl


Simulator terminated at time 4126.140544
 after receiving 5 msgs at layer5
Simulator Analysis:
  Number of messages sent from 5 to 4: 9
  Number of messages received at Layer 5, side A: 0
  Number of messages received at Layer 5, side B: 5
  Number of messages incorrectly received at layer 5: 0
  Number of packets entering the network: 17
  Average number of packets already in network:     0.000
  Number of packets that the network lost: 4
  Number of packets that the network corrupted: 0
  Number of packets that the network put out of order: 4
djsully@djsully:~/Desktop/project2/djsullivan_project2_ABP$
```