

Sample outputs of the client/server program of Part 2 (with PACKET DROP RATE and PACKET ERROR RATE set to **0.1**) in transferring a small file.

```
atctam@atctamws: ~/Desktop/Dropbox/c3234/Project-2017/Part2
atctam@atctamws:~/Desktop/Dropbox/c3234/Project-2017/Part2$ python3 test-client2
.py localhost slidingW.png 0.1 0.1
Open file successfully
File bytes are 9205
Drop rate: 0.1 Error rate: 0.1
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 4
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 12
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 10
Received server positive response
Start the file transfer . . .
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 0 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received a corrupted packet: Type = DATA, Length = 6
rdt_send: Drop the packet
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 205
Completed the file transfer.
Total elapse time: 0.463 s      Throughput: 19.88 KB/s
rdt_close: Nothing happened for 0.500 second
rdt_close: Release the socket
Client program terminated
atctam@atctamws:~/Desktop/Dropbox/c3234/Project-2017/Part2$
```

```
atctam@atctamws: ~/Desktop/Dropbox/c3234/Project-2017/Part2
atctam@atctamws:~/Desktop/Dropbox/c3234/Project-2017/Part2$ python3 test-server2
.py localhost 0.1 0.1
Drop rate: 0.1 Error rate: 0.1
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 10
Received client request: file size = 9205
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 18
Open file ./Store/slidingW.png for writing successfully
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 4
Start receiving the file . . .
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a message of size 1006
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a message of size 1006
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 211
rdt_close: Nothing happened for 0.500 second
rdt_close: Release the socket
Completed the file transfer.
Server program terminated
atctam@atctamws:~/Desktop/Dropbox/c3234/Project-2017/Part2$
```

Part of the sample outputs of the client/server program of Part 2 (with PACKET DROP RATE and PACKET ERROR RATE set to 0.3) in transferring a small file.

```
atctam@atctamws: ~/Desktop/Dropbox/c3234/Project-2017/Part2
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 0 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 0 again
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 0 again
WARNING: udt_send: Packet corrupted in unreliable layer!!
rdt_send: Timeout!! Retransmit the packet 0 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 1000
rdt_send: Timeout!! Retransmit the packet 1 again
rdt_send: Received the expected ACK
rdt_send: Sent one message of size 205
Completed the file transfer.
Total elapse time: 1.772 s      Throughput: 5.20 KB/s
rdt_close: Nothing happened for 0.500 second
rdt_close: Release the socket
Client program terminated
atctam@atctamws:~/Desktop/Dropbox/c3234/Project-2017/Part2$
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atctam@atctamws: ~/Desktop/Dropbox/c3234/Project-2017/Part2
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Got an expected packet
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a message of size 1006
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a retransmission DATA packet from peer!!
rdt_rcv: Retransmit the ACK packet
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Received a corrupted packet: Type = DATA, Length = 1006
rdt_rcv: Drop the packet
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
rdt_rcv: Received a message of size 1006
rdt_rcv: Got an expected packet
WARNING: udt_send: Packet lost in unreliable layer!!
rdt_rcv: Received a message of size 211
rdt_close: Received a retransmission DATA packet from peer!!
rdt_close: Retransmit the ACK packet
rdt_close: Nothing happened for 0.500 second
rdt_close: Release the socket
Completed the file transfer.
Server program terminated
atctam@atctamws: ~/Desktop/Dropbox/c3234/Project-2017/Part2S

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