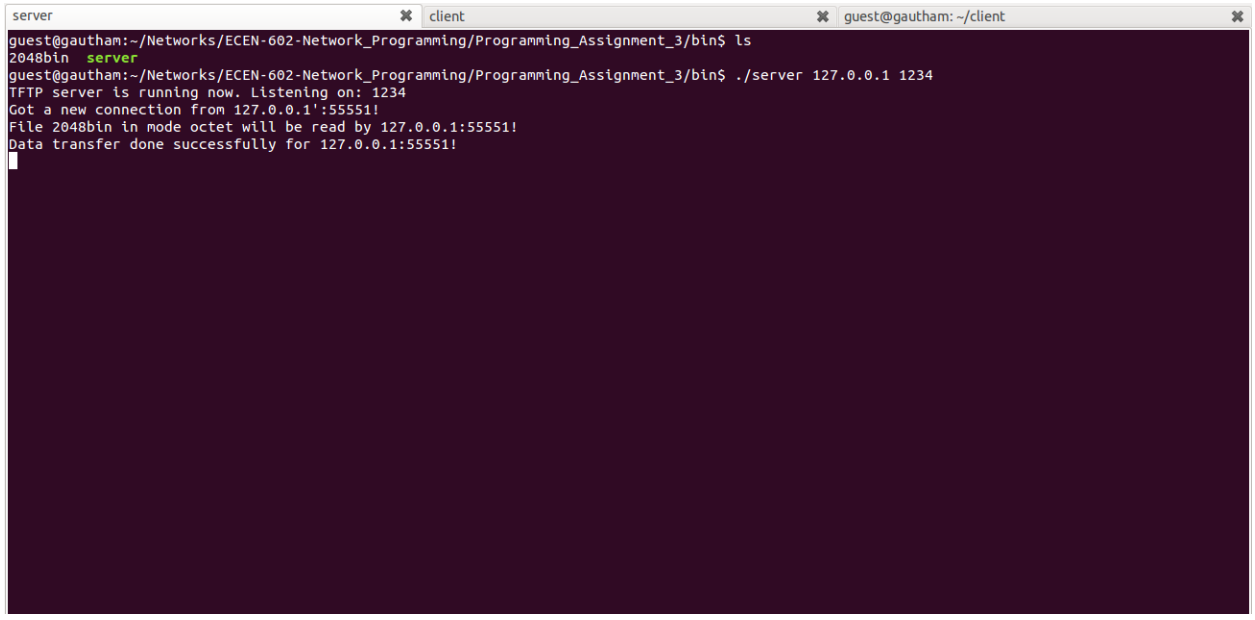
ECEN 602 Assignment 3 Test Cases

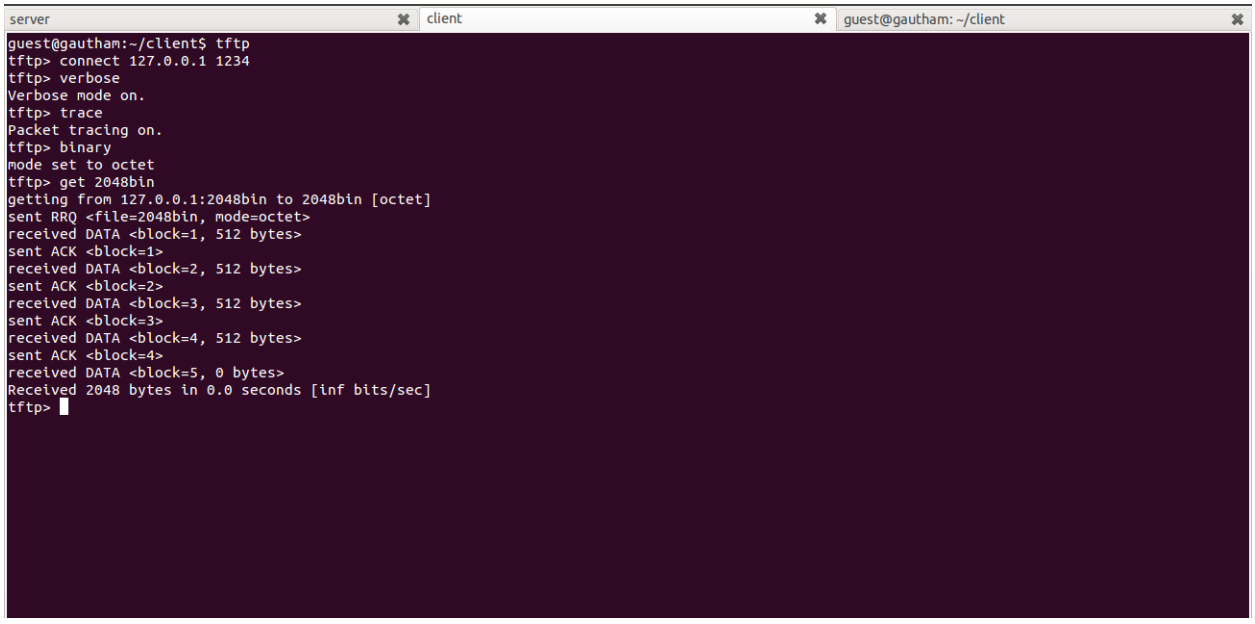
Following are the use cases tested:

1. Transfer binary file of 2048 bytes
   The clients connects to the server with port number as 1234 and requests for 2048bin file. The server sends data in UDP format in terms of blocks each having 512 bytes.

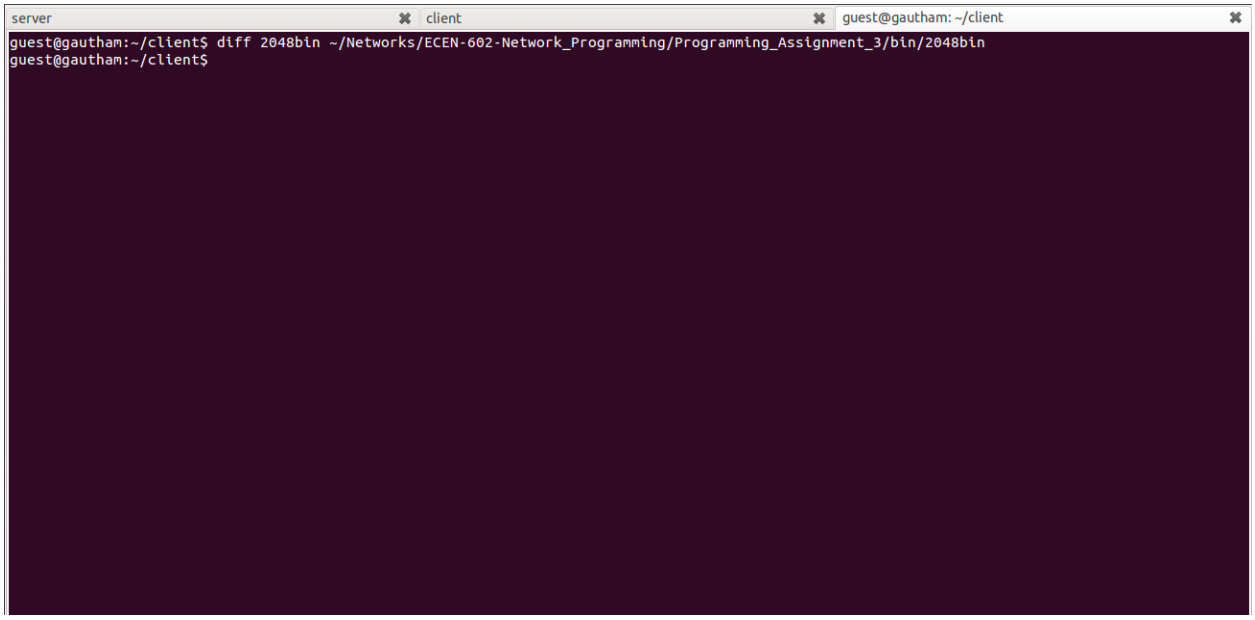
Server



Client



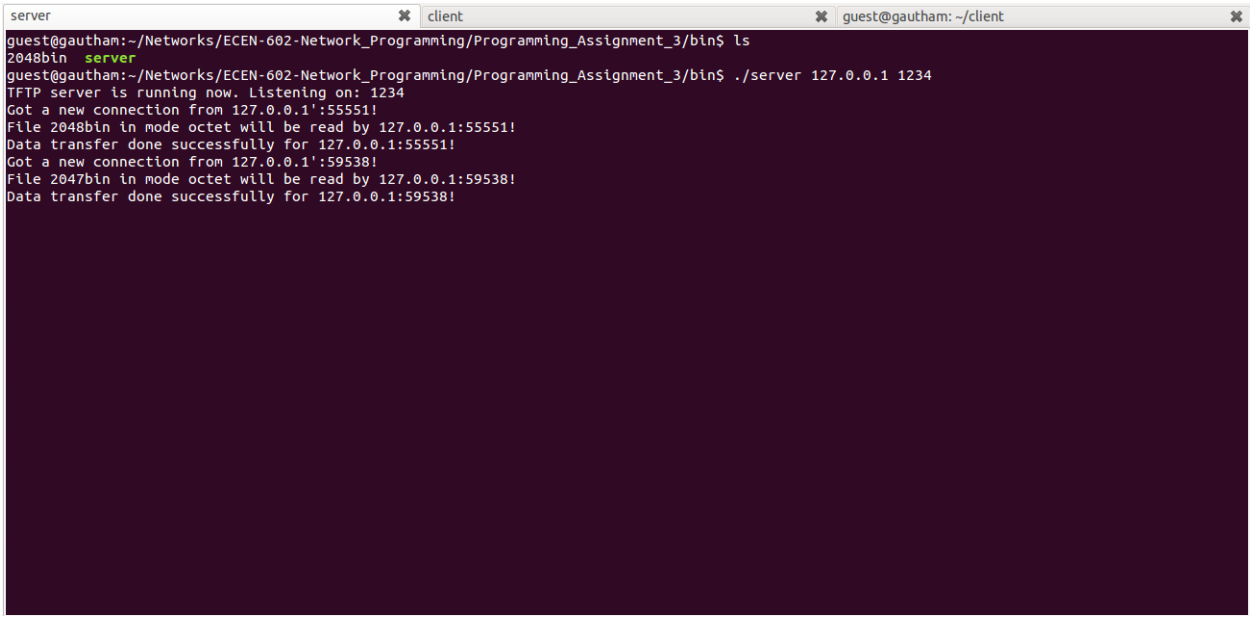
diff



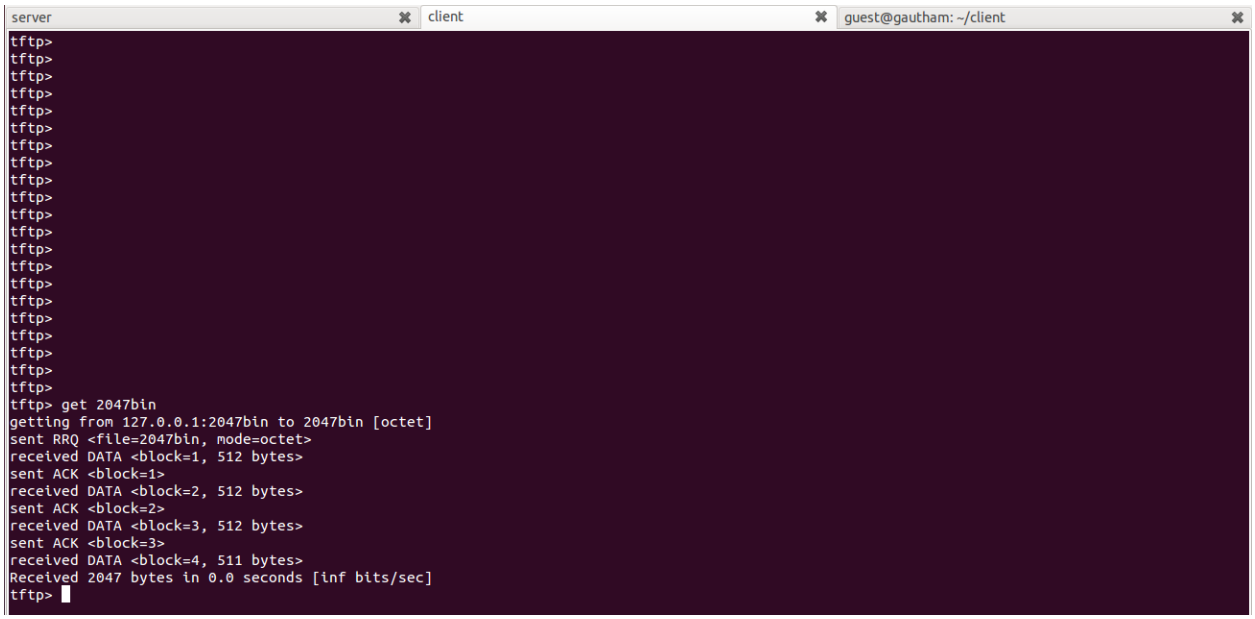
2. Transfer binary file of 2047 bytes

   The clients connects to the server with port number as 1234 and requests for 2047bin file. The server sends data in UDP format in terms of blocks each having 512 bytes.

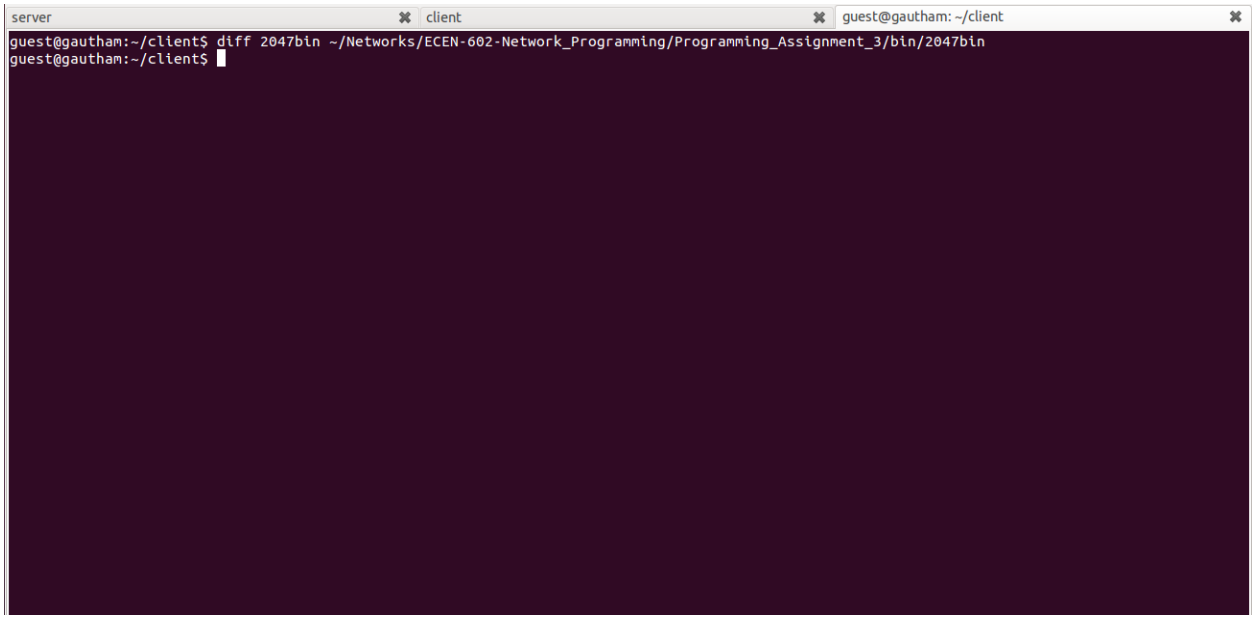
Server



Client

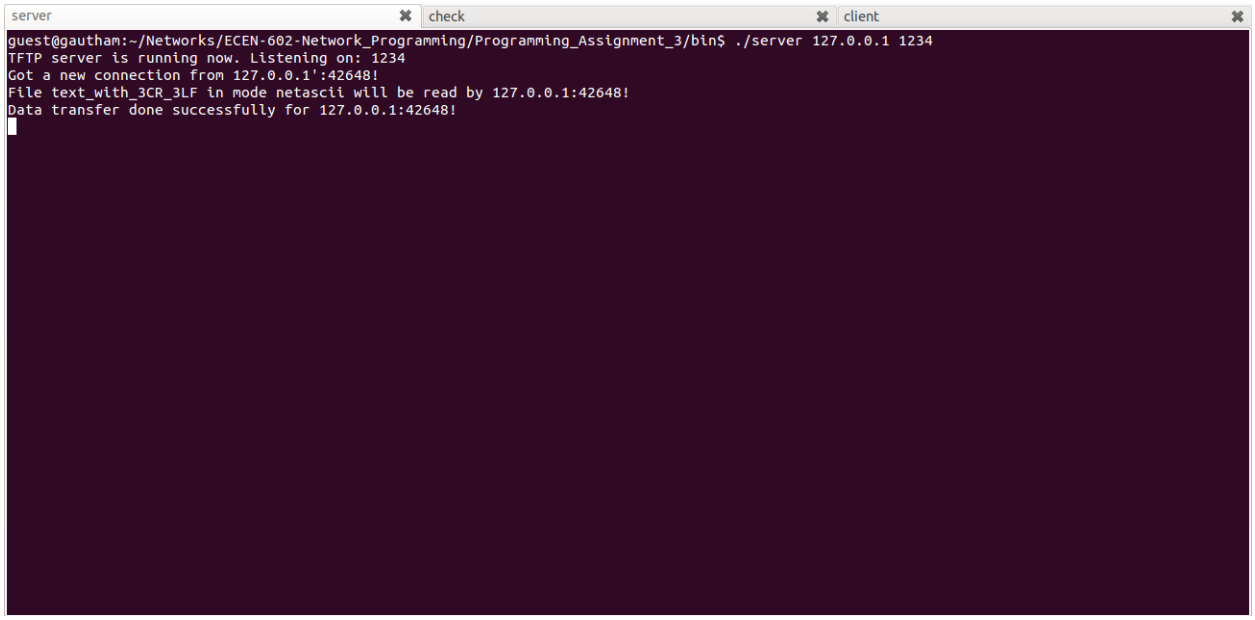

server
client
guest@gautham: ~/client
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp>
tftp> get 2047bin
getting from 127.0.0.1:2047bin to 2047bin [octet]
sent RRQ <file=2047bin, mode=octet>
received DATA <block=1, 512 bytes>
sent ACK <block=1>
received DATA <block=2, 512 bytes>
sent ACK <block=2>
received DATA <block=3, 512 bytes>
sent ACK <block=3>
received DATA <block=4, 511 bytes>
Received 2047 bytes in 0.0 seconds [inf bits/sec]
tftp>

Diff

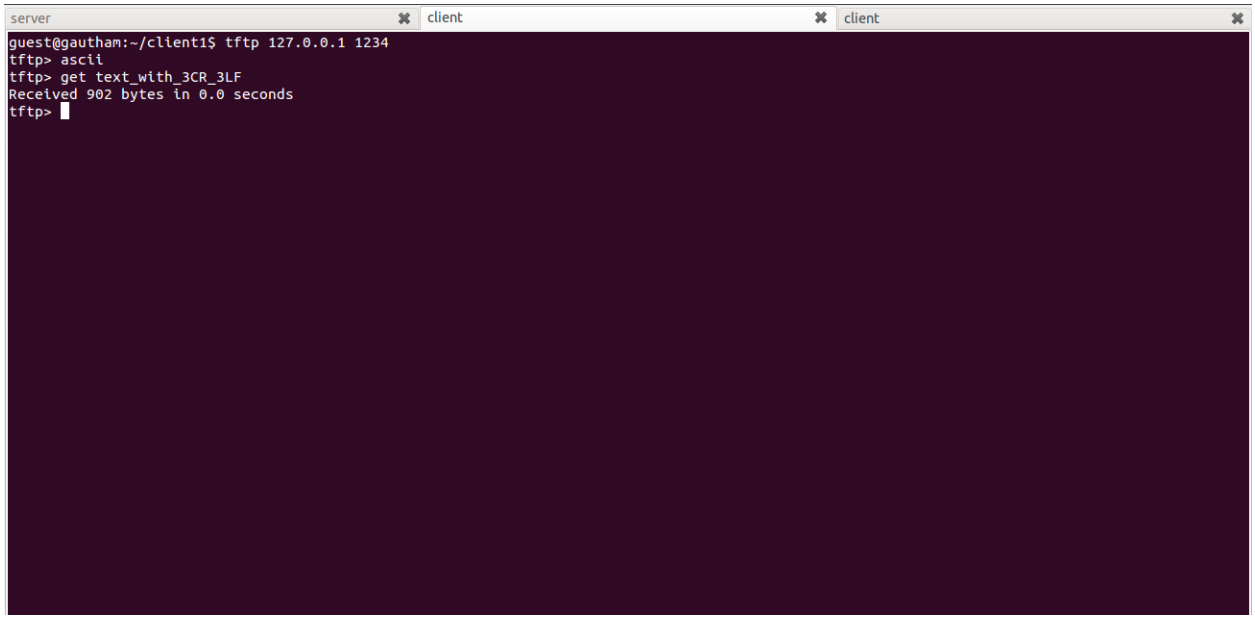

server
client
guest@gautham: ~/client
guest@gautham:~/client$ diff 2047bin ~/Networks/ECEN-602-Network_Programming/Programming_Assignment_3/bin/2047bin
guest@gautham:~/client$

3. Transfer of ascii file that includes 3 CRs

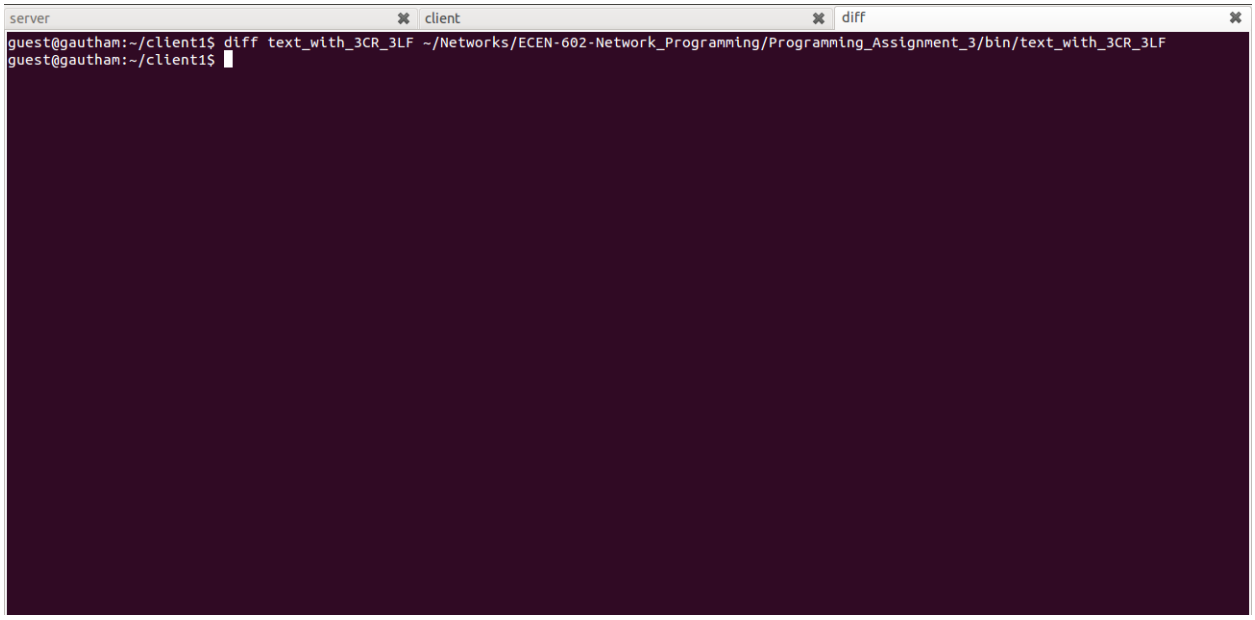
Server



Client

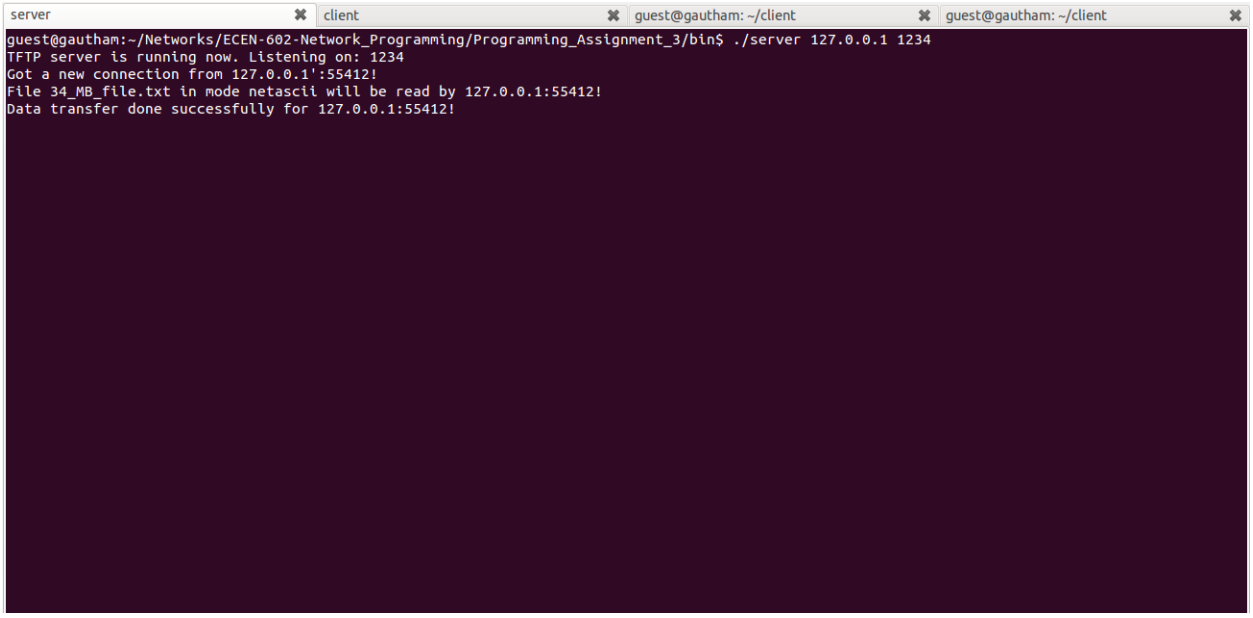


Diff

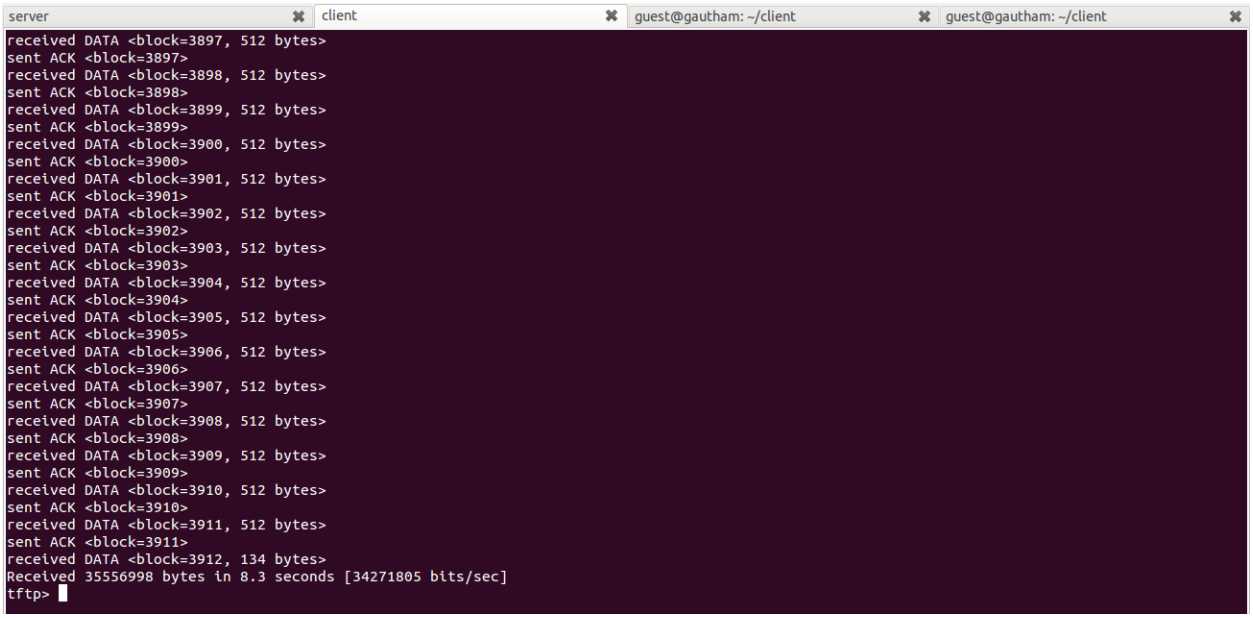

server
client
diff
guest@gautham:~/client1$ diff text_with_3CR_3LF ~/Networks/ECEN-602-Network_Programming/Programming_Assignment_3/bin/text_with_3CR_3LF
guest@gautham:~/client1$

4. Transfer of 34MB file and check if wrap around occurs
   Client asks for 34MB file to the server. Since server can send maximum of 65535 blocks, it wraps around sending from the first block.

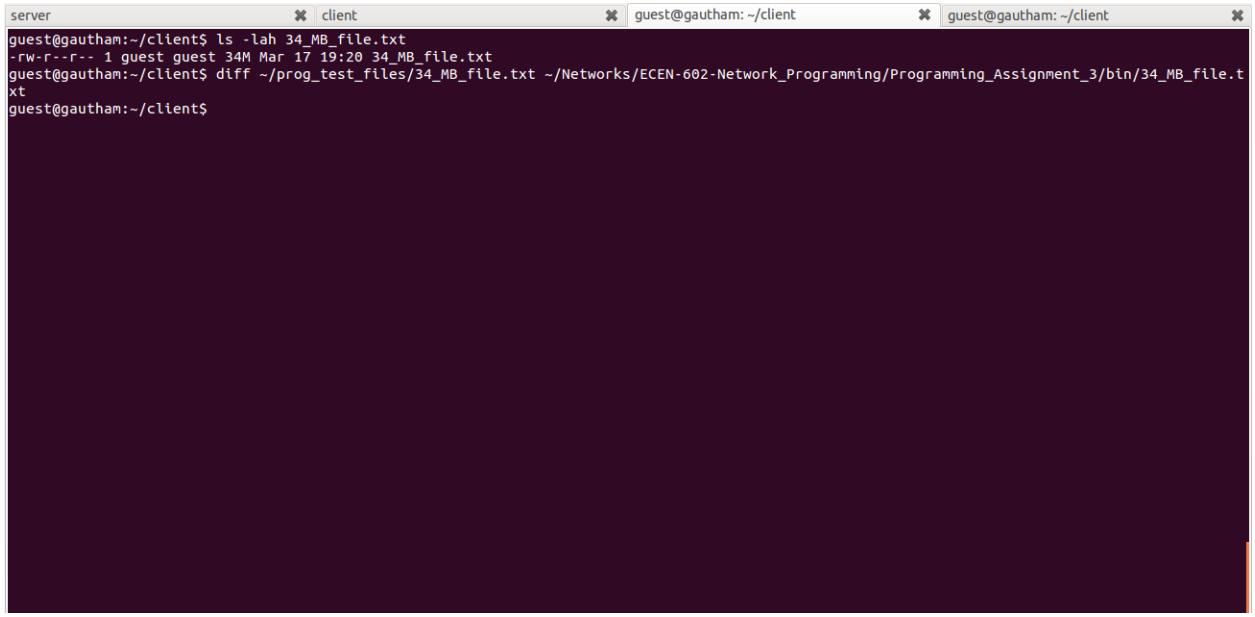
Server



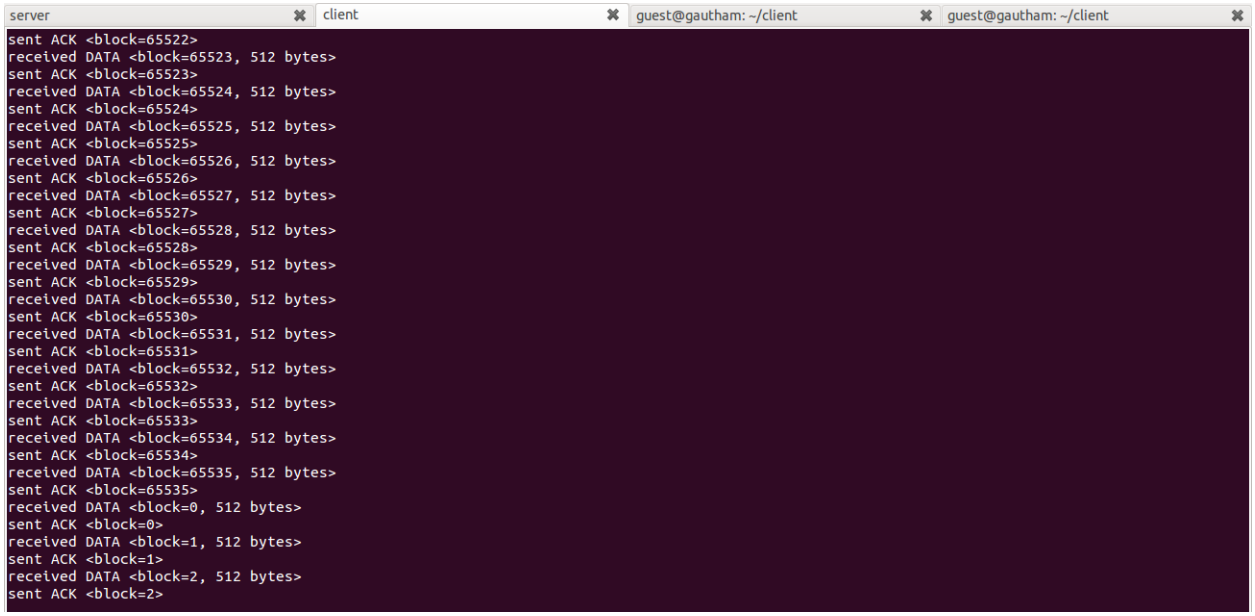
Client



Diff



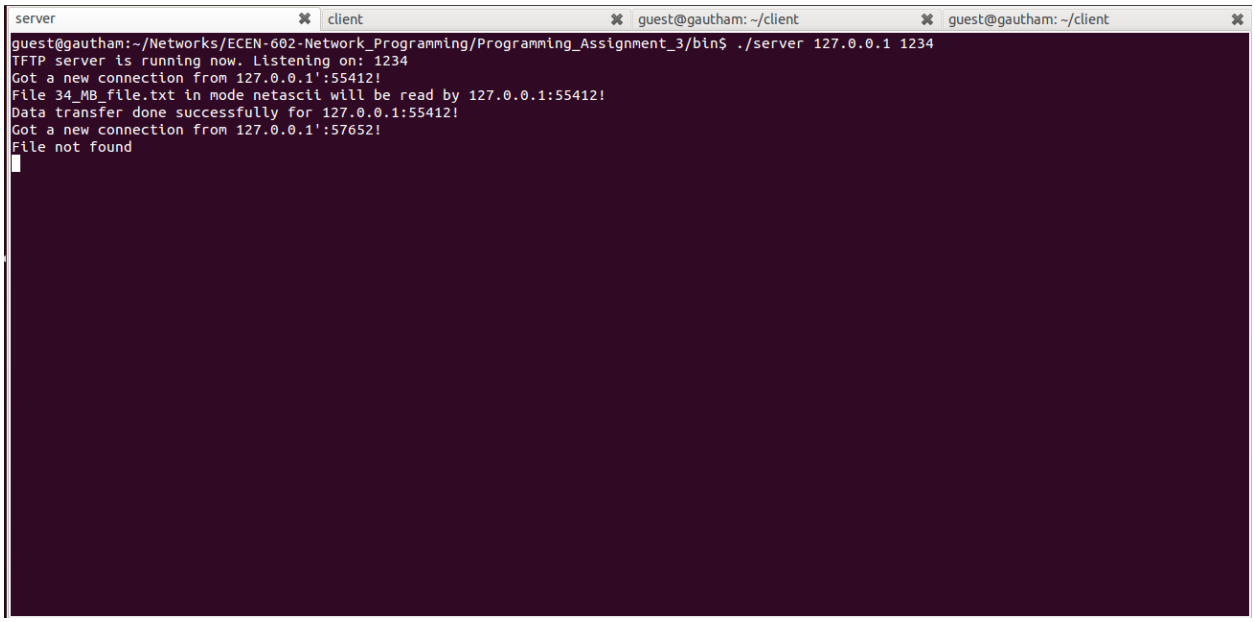
Wrap around



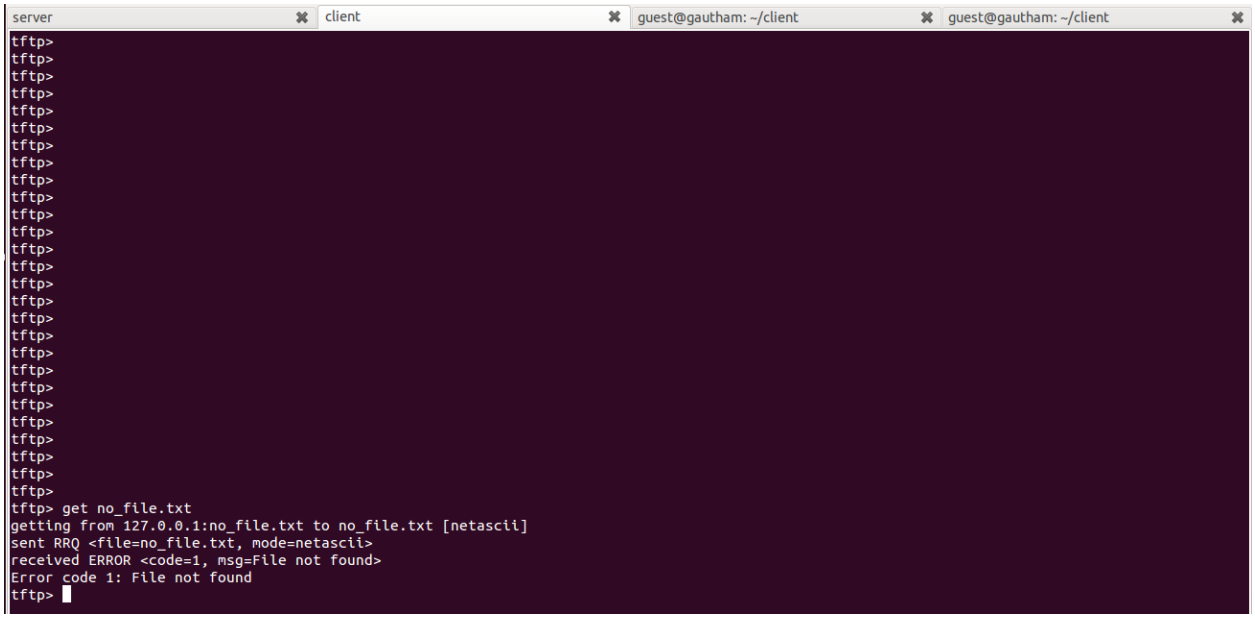
5. Error message when file is not present

   Server sends an error code to the client when the file requested is not present.

Server



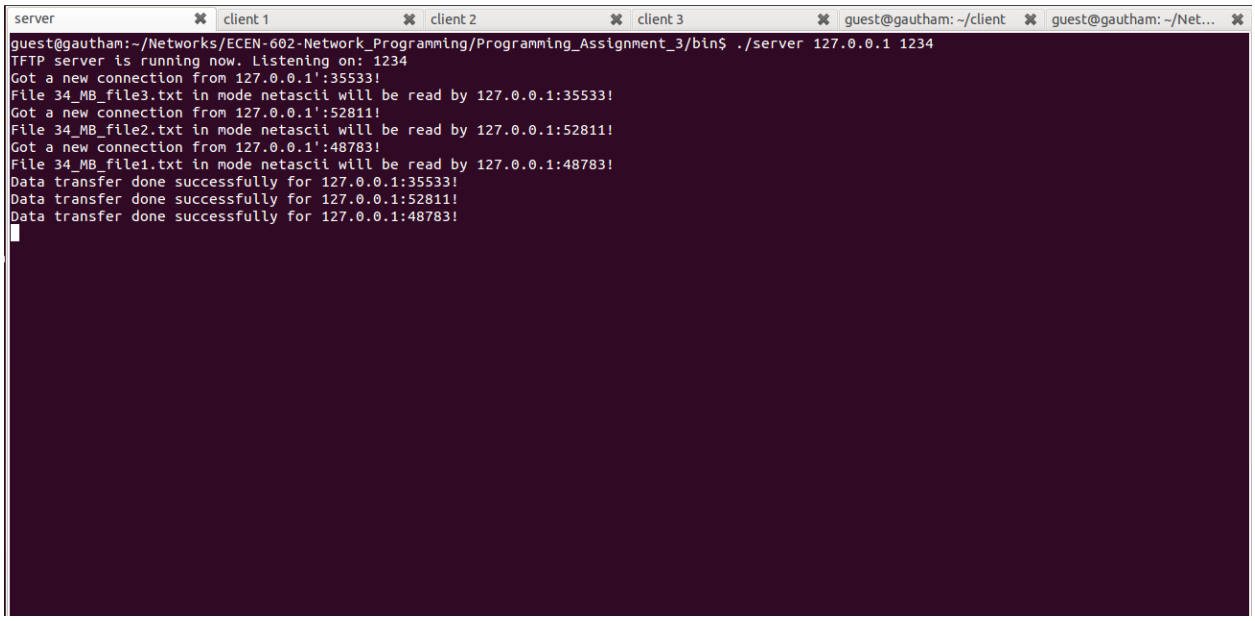
Client



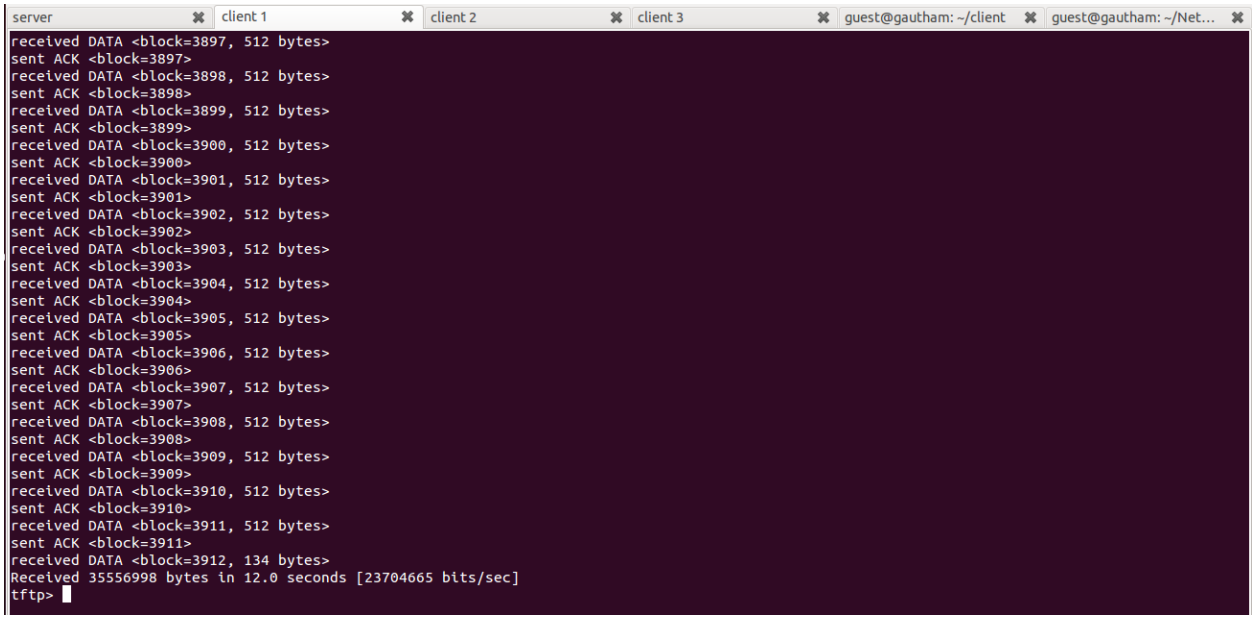
6. Connect to TFTP server with 3 clients

   3 clients connect to TFTP server and request 34MB file simultaneously.

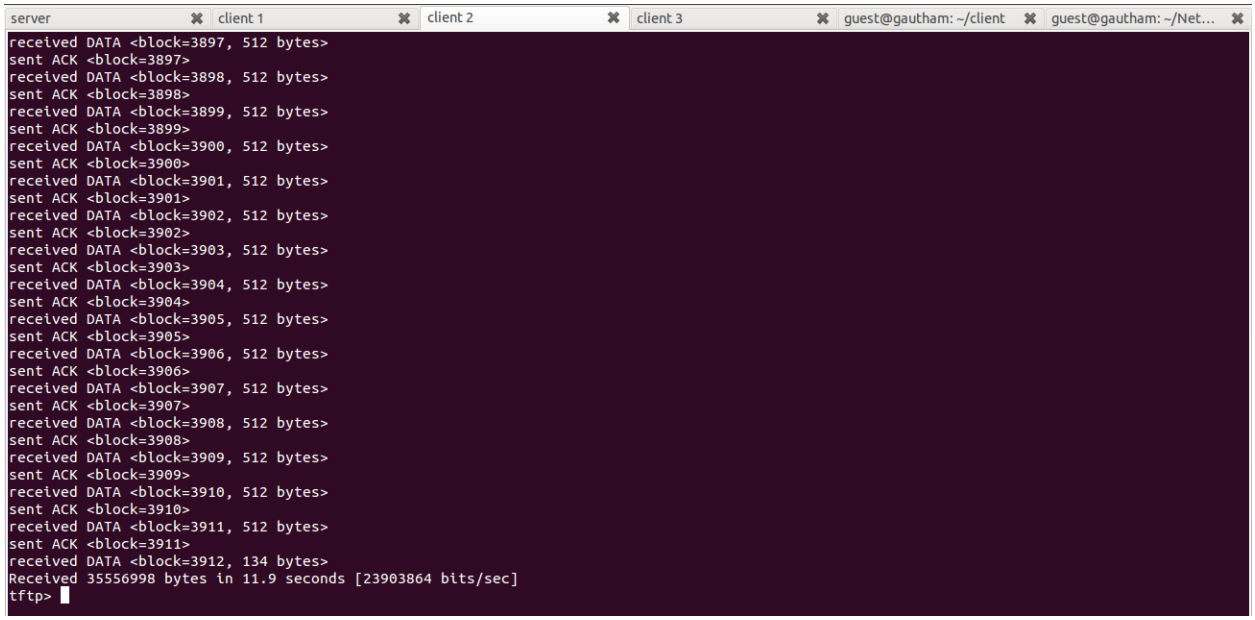
Server



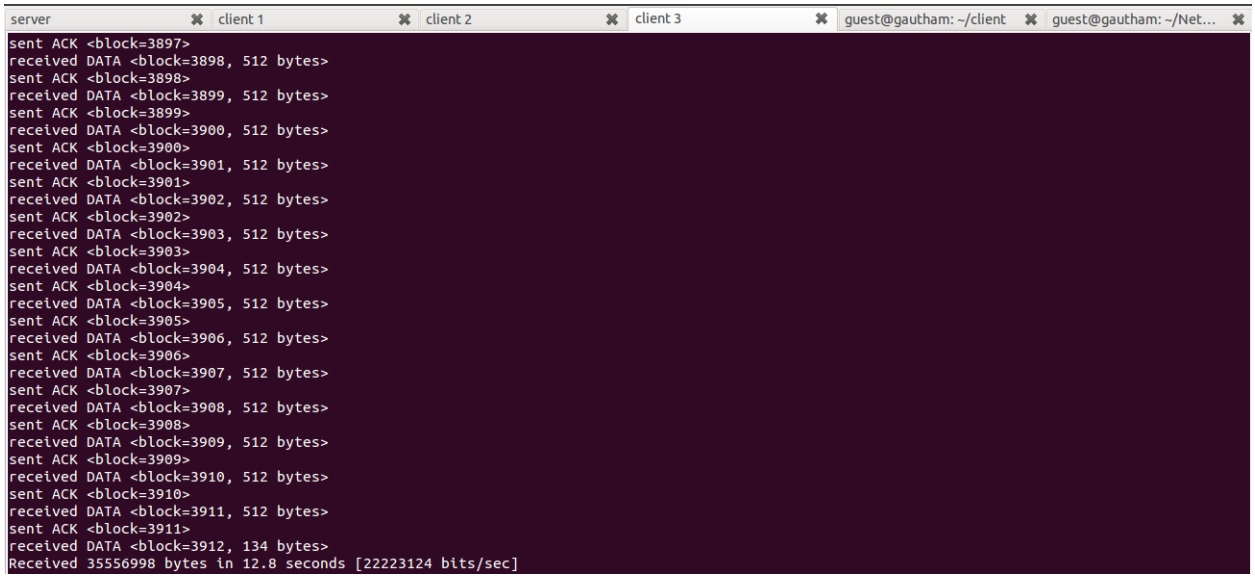
Client 1



Client 2



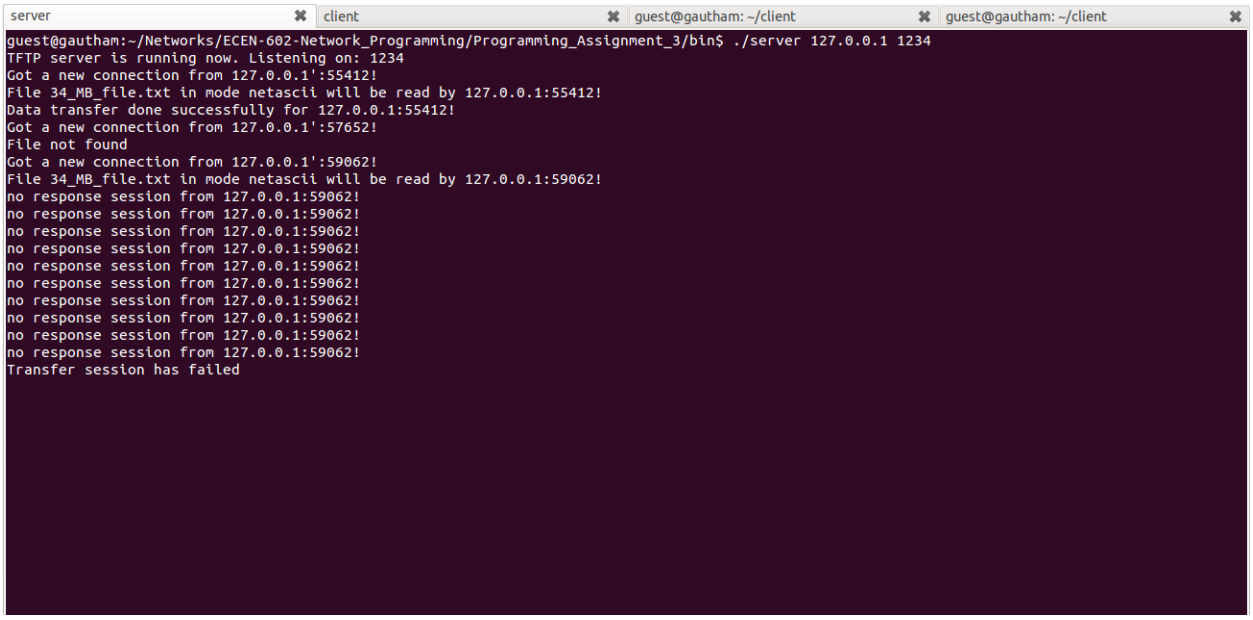
Client 3



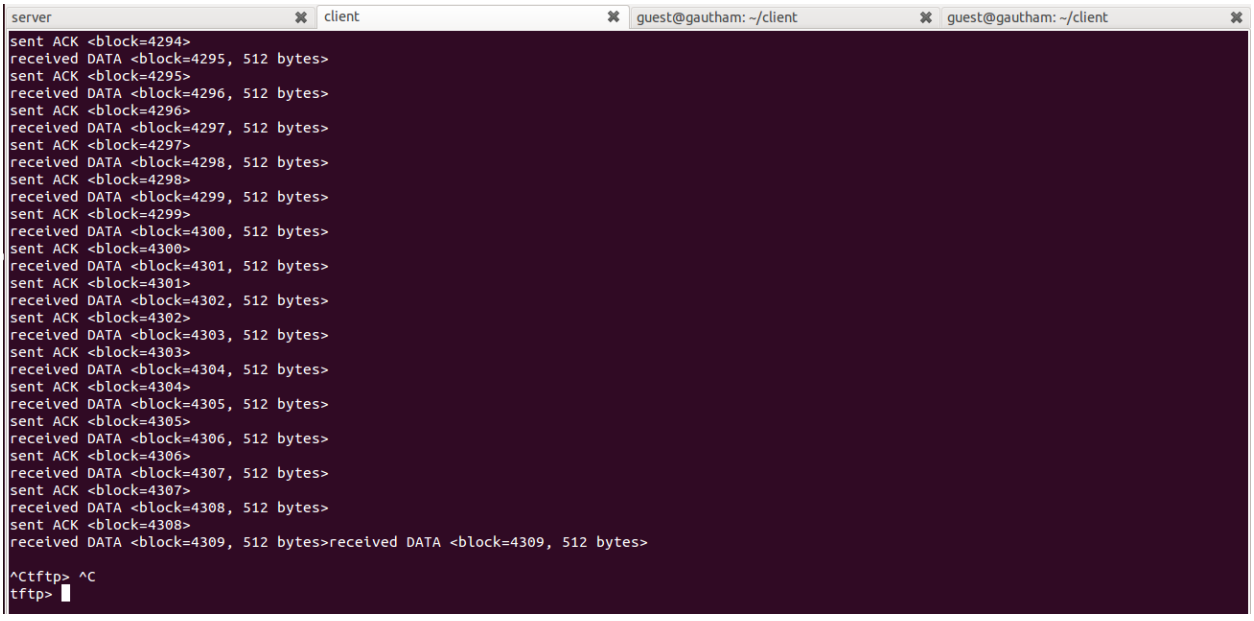
7. Terminate TFTP client in the middle of transfer

   When the client is terminated in between the transfer, the server waits for 10 seconds and displays transfer session has failed, indicating the client connection is lost.

Server



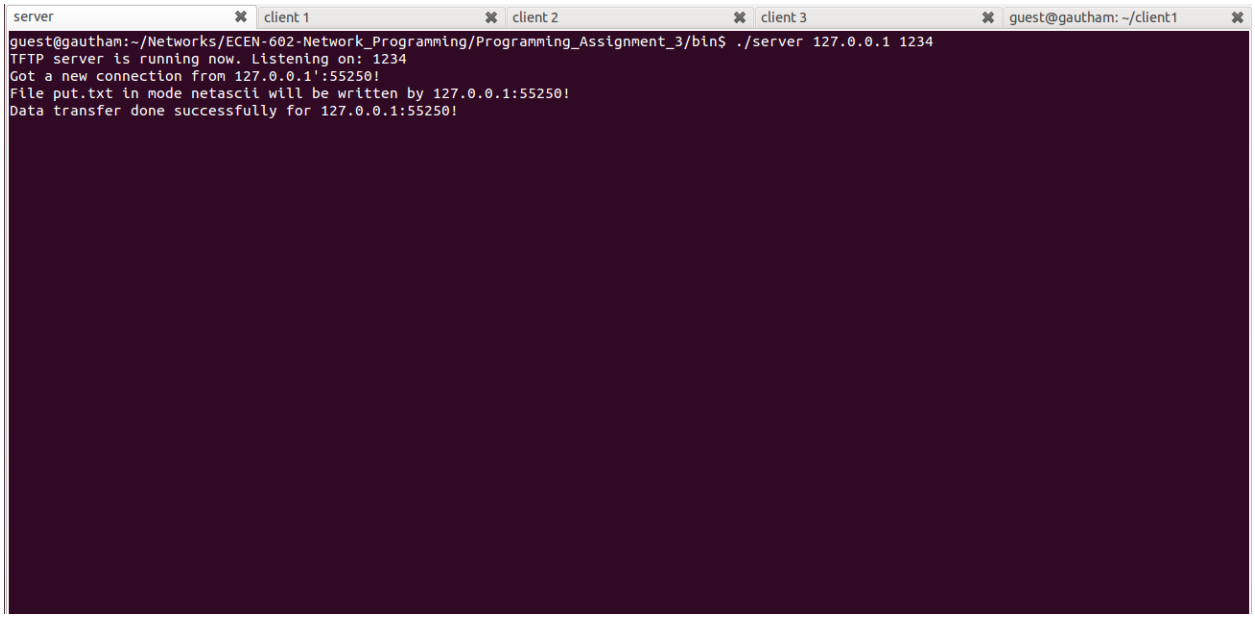
Client



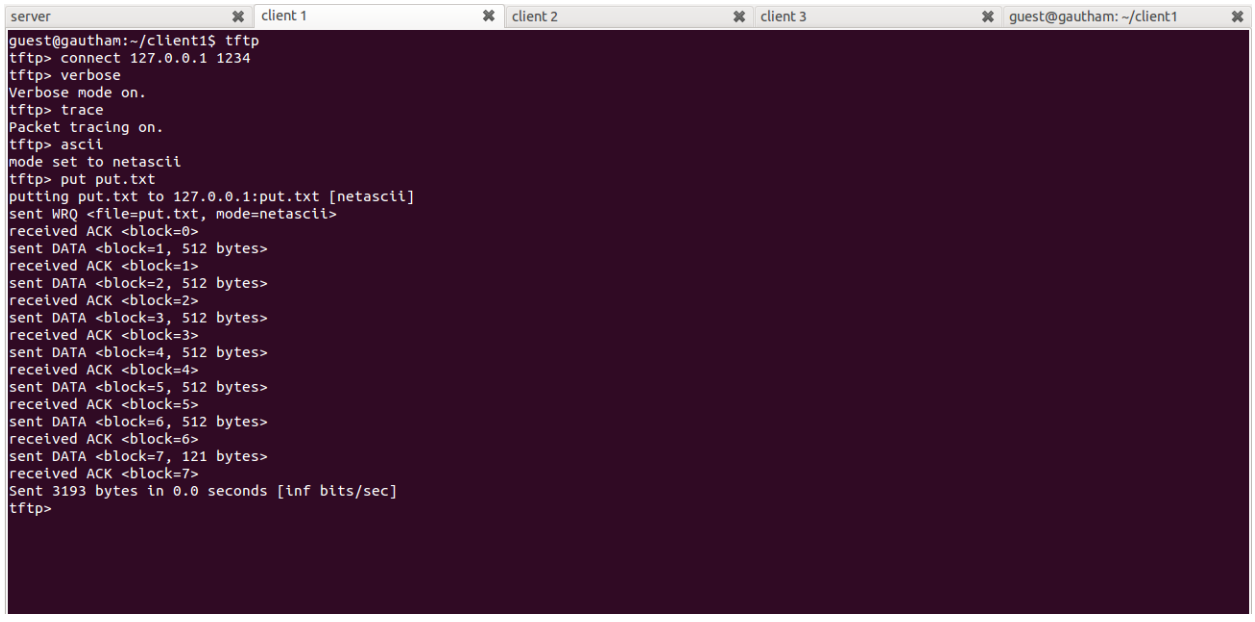
8. WRQ Bonus feature

   Clients request WRQ to the server. The server sends ack to that command. Later, the client starts sending data to the server.

Server



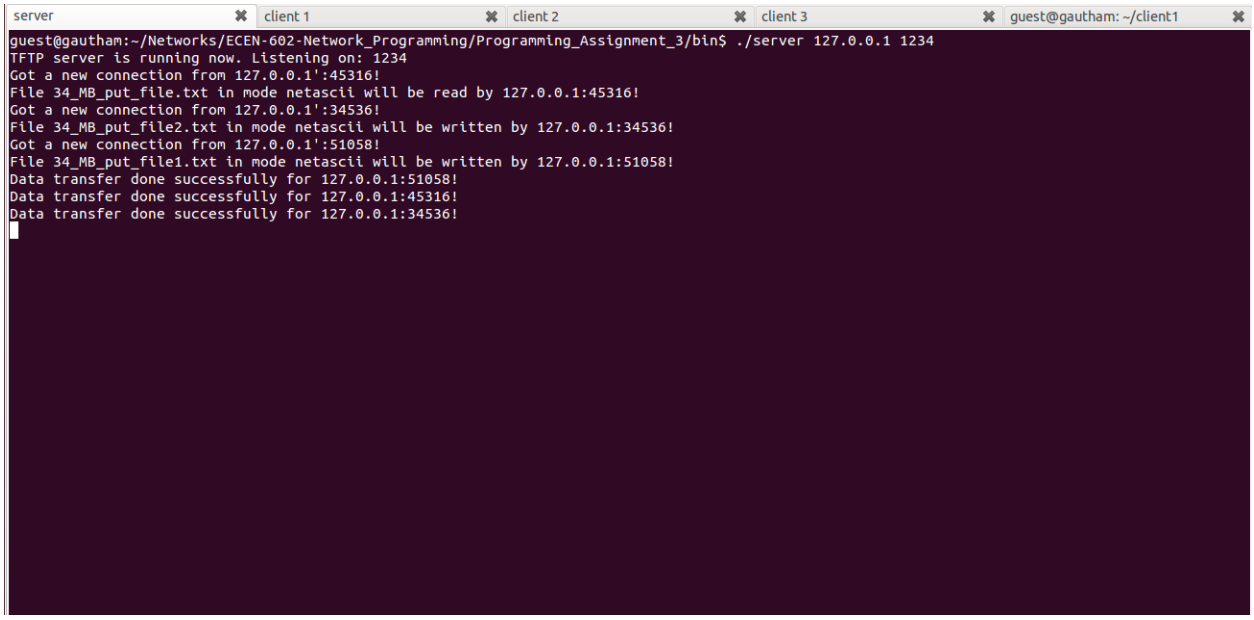
Client



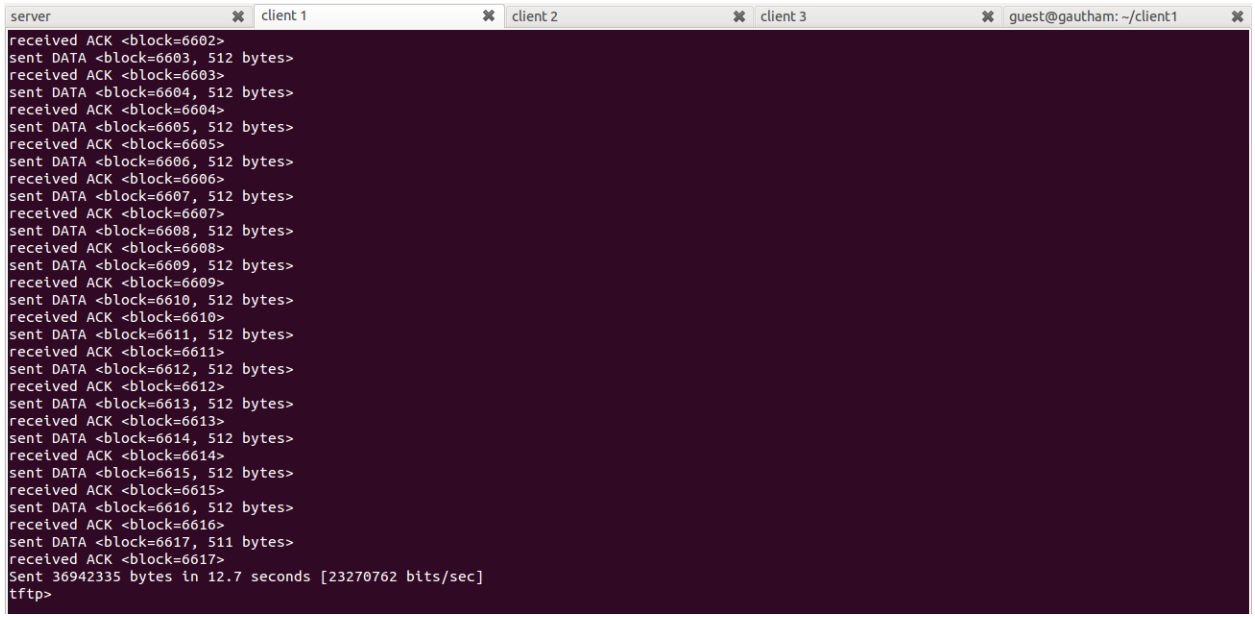
9. 2 Put, 1 Get

   In this test case, two clients send data to the server and third client receives data from server simultaneously.

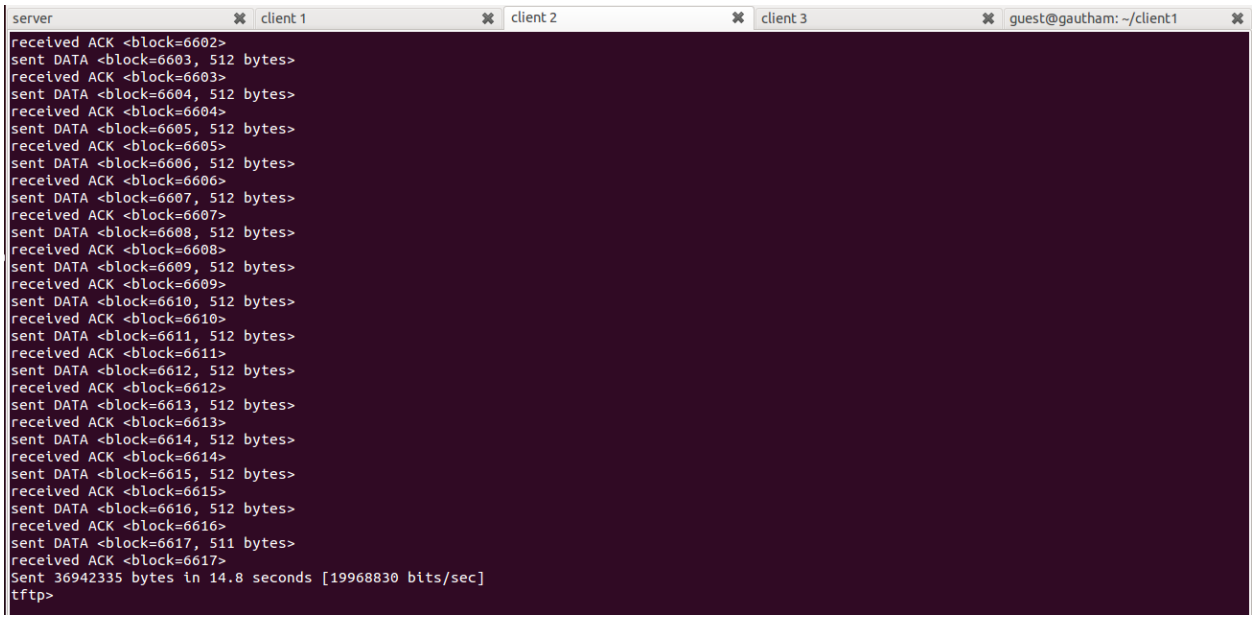
Server



Client1



Client 2



Client 3