

Comp 4981 - Assignment 3

Testing Documentation

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Steps For Testing/Running the Program

1. Open terminal
2. Run make
3. Run the server executable and client executable

./server_<Optional: port> Default is port 7000

./client_<your ip address>_<Optional: port> Default is port 7000

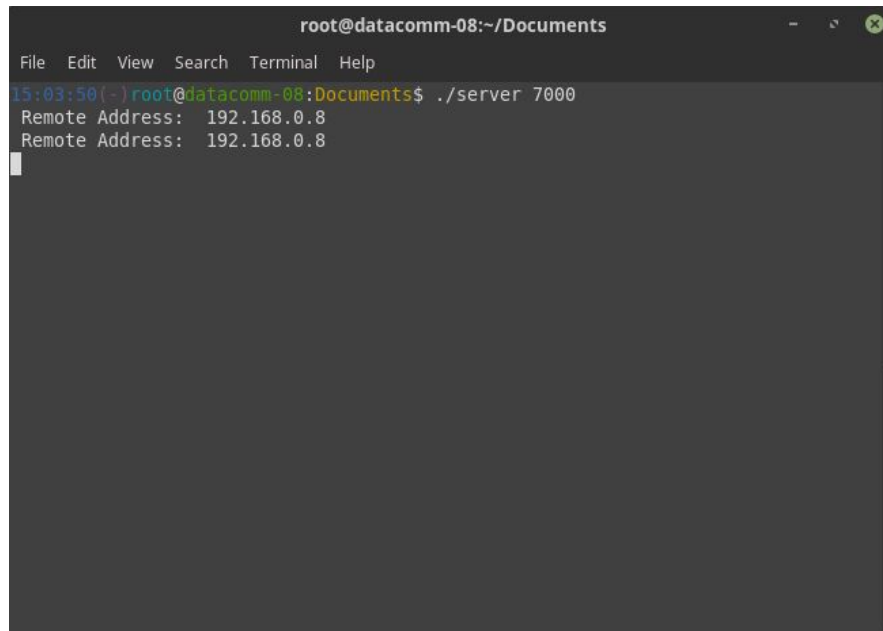
4. Wait for another client to be connected
5. Type in data that you want to send. Press the **Enter** key to send the data to the server.

Note: If you want to disconnect from the server, type in -q; If you want to save a chat log, type in -s

Testing Diagrams

Test 1

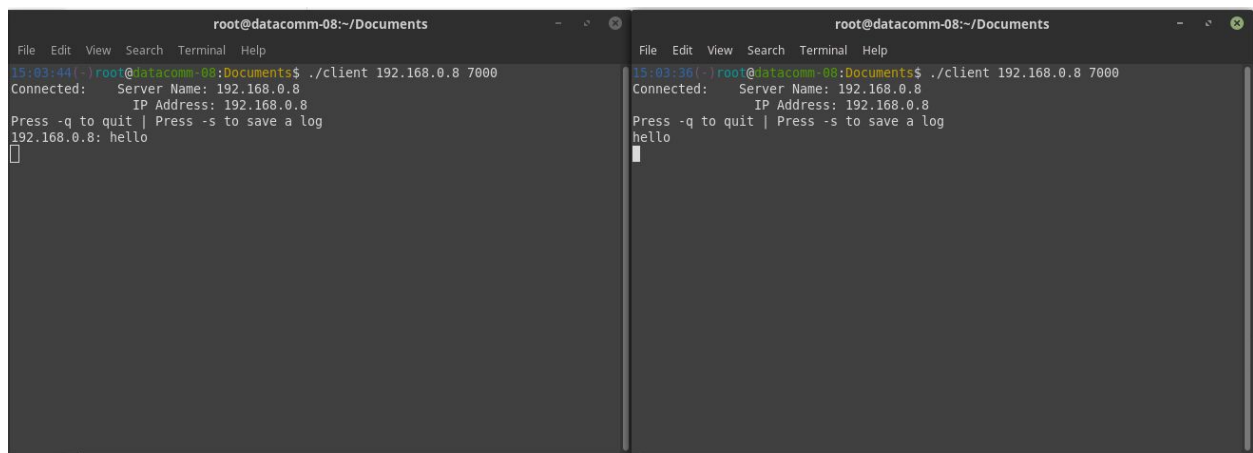
Attempting to form a connection from the server side. In this example we opened a server and allowed for a connection. We specified a port for the connection to form on.

A terminal window titled 'root@datacomm-08:~/Documents' with a menu bar (File, Edit, View, Search, Terminal, Help). The prompt is '15:03:50 (-) root@datacomm-08:Documents\$'. The user enters './server 7000'. The output shows 'Remote Address: 192.168.0.8' on two lines.

```
root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:03:50 (-) root@datacomm-08:Documents$ ./server 7000
Remote Address: 192.168.0.8
Remote Address: 192.168.0.8
```

Test 2

Sending a message through the server to another client. Here we connected two clients and sent a message through the server and see it received by another client.

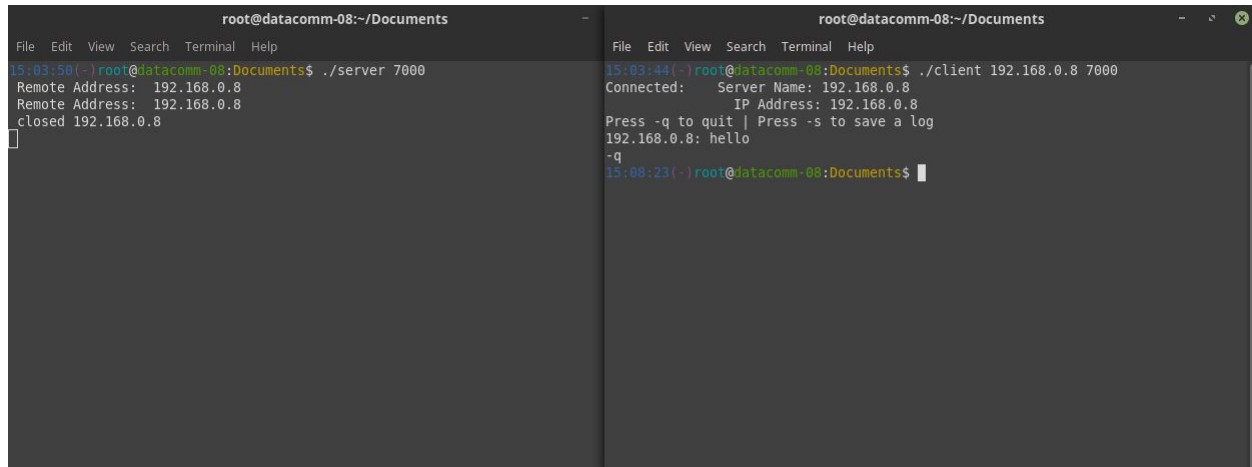
Two terminal windows side-by-side, both titled 'root@datacomm-08:~/Documents'. The left window shows a client connected to the server at 192.168.0.8:7000, displaying 'Server Name: 192.168.0.8' and 'IP Address: 192.168.0.8'. The user enters '192.168.0.8: hello'. The right window shows another client connected to the same server, displaying the same server information. The user enters 'hello'.

```
root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:03:44 (-) root@datacomm-08:Documents$ ./client 192.168.0.8 7000
Connected:      Server Name: 192.168.0.8
                IP Address: 192.168.0.8
Press -q to quit | Press -s to save a log
192.168.0.8: hello

root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:03:46 (-) root@datacomm-08:Documents$ ./client 192.168.0.8 7000
Connected:      Server Name: 192.168.0.8
                IP Address: 192.168.0.8
Press -q to quit | Press -s to save a log
hello
```

Test 3

Disconnecting a client. Here we close the connection from the client side and see that the server is aware of the disconnect..

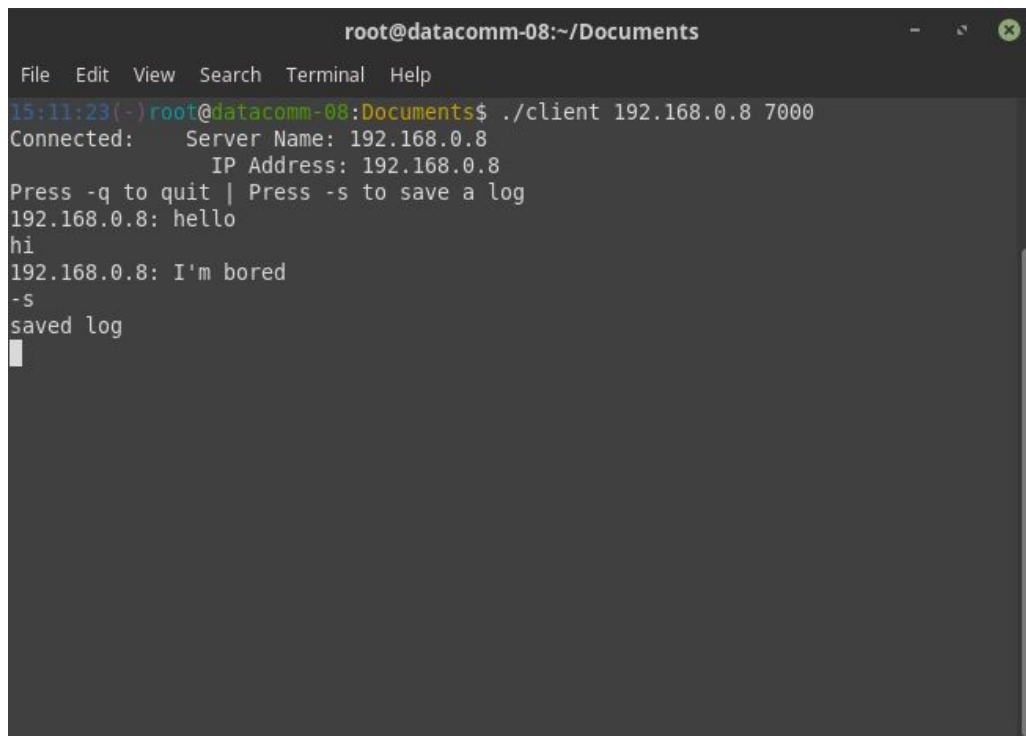


```
root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:03:58(~/)root@datacomm-08:Documents$ ./server 7000
Remote Address: 192.168.0.8
Remote Address: 192.168.0.8
closed 192.168.0.8
[

root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:03:44(~/)root@datacomm-08:Documents$ ./client 192.168.0.8 7000
Connected: Server Name: 192.168.0.8
IP Address: 192.168.0.8
Press -q to quit | Press -s to save a log
192.168.0.8: hello
-q
15:08:23(~/)root@datacomm-08:Documents$
```

Test 4

Saving a log. Here we used the programmed save flag to save the comm log . Once a short communication has been relayed between two clients we call the save flag and the log is saved.



```
root@datacomm-08:~/Documents
File Edit View Search Terminal Help
15:11:23(~/)root@datacomm-08:Documents$ ./client 192.168.0.8 7000
Connected: Server Name: 192.168.0.8
IP Address: 192.168.0.8
Press -q to quit | Press -s to save a log
192.168.0.8: hello
hi
192.168.0.8: I'm bored
-s
saved log
[
```

Here you can see that the log has been successfully saved.

