3 – Implement a multi user chat server using TCP as transport layer protocol (fully automated)

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48 S6 CSE

The program shows a multi client – server communication using TCP.

Compiling
Compile the four files, Client1.java, Client2.java, Client3.java and Server.java using javac command.

$ javac Client1.java
$ javac Client2.java
$ javac Client3.java
$ javac Server.java

Executing
Use four terminals, three for the clients and the other for the Server. Since it is TCP, the server should be running before the client starts running.

$ java Server

Then run the client file in the other terminals,

$ java Client1
$ java Client2
$ java Client3

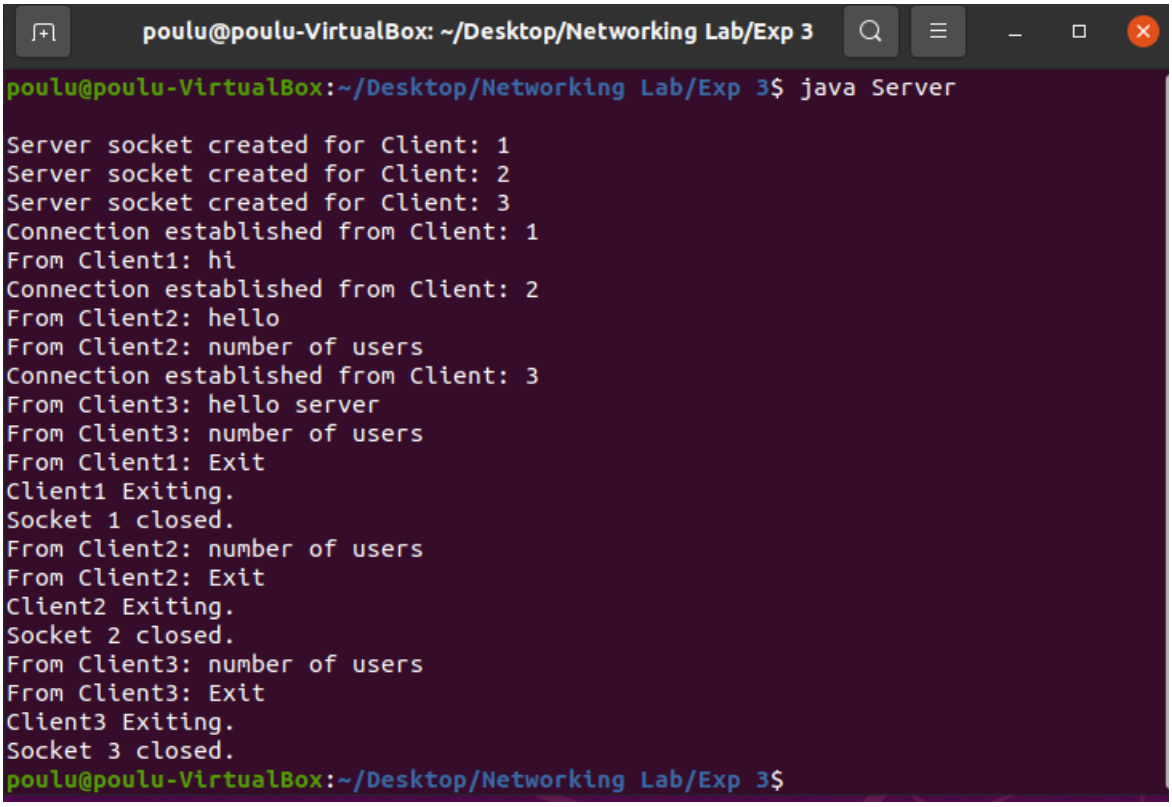
Now it is possible to communicate between each client and server. The server automatically replies to select messages from the client. The supported messages are:

1. “hi”, “hello” and “hello server”
2. “number of users”
3. “Exit”

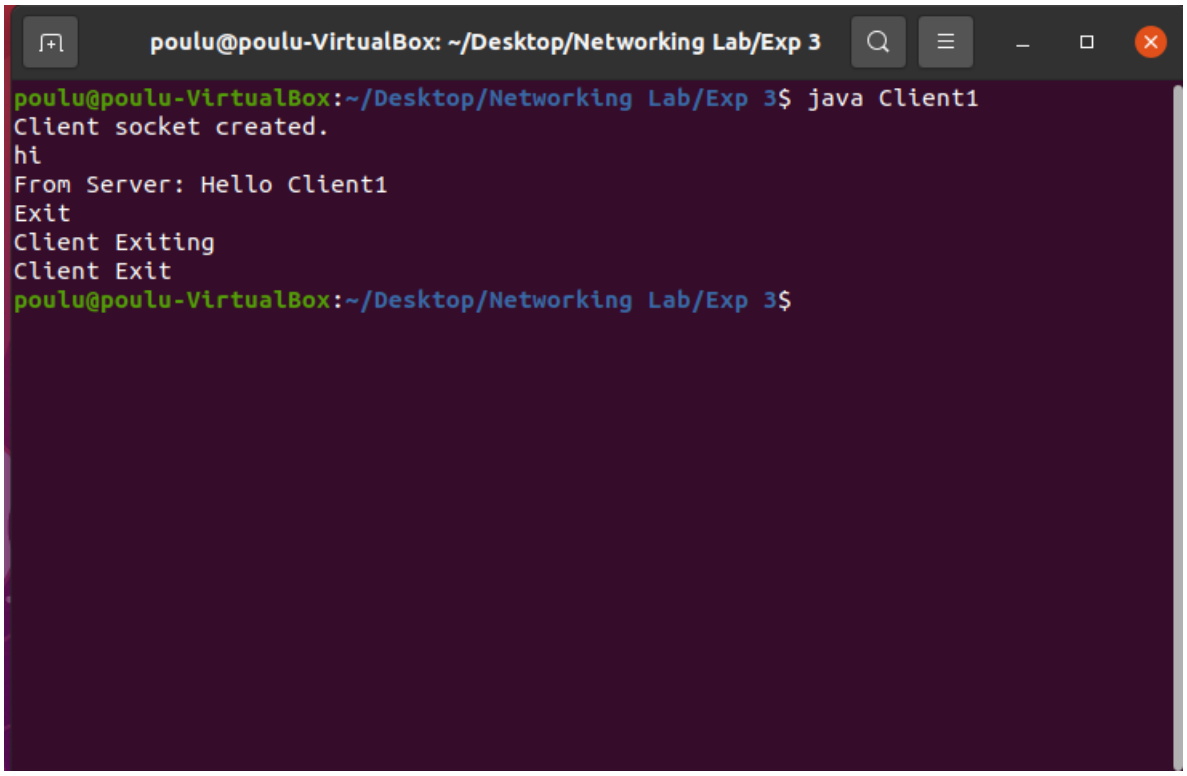
To exit, the client should send “Exit”. Once all clients have exited, the server also exits.

Output:

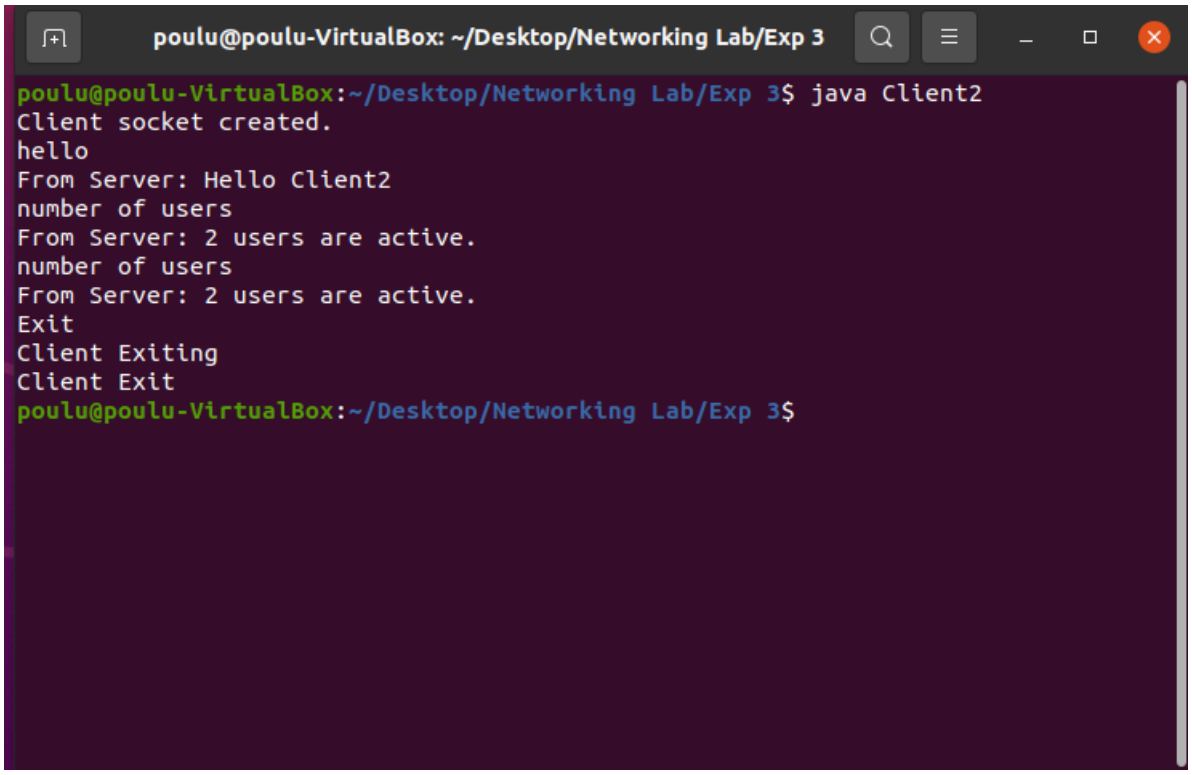
Server:



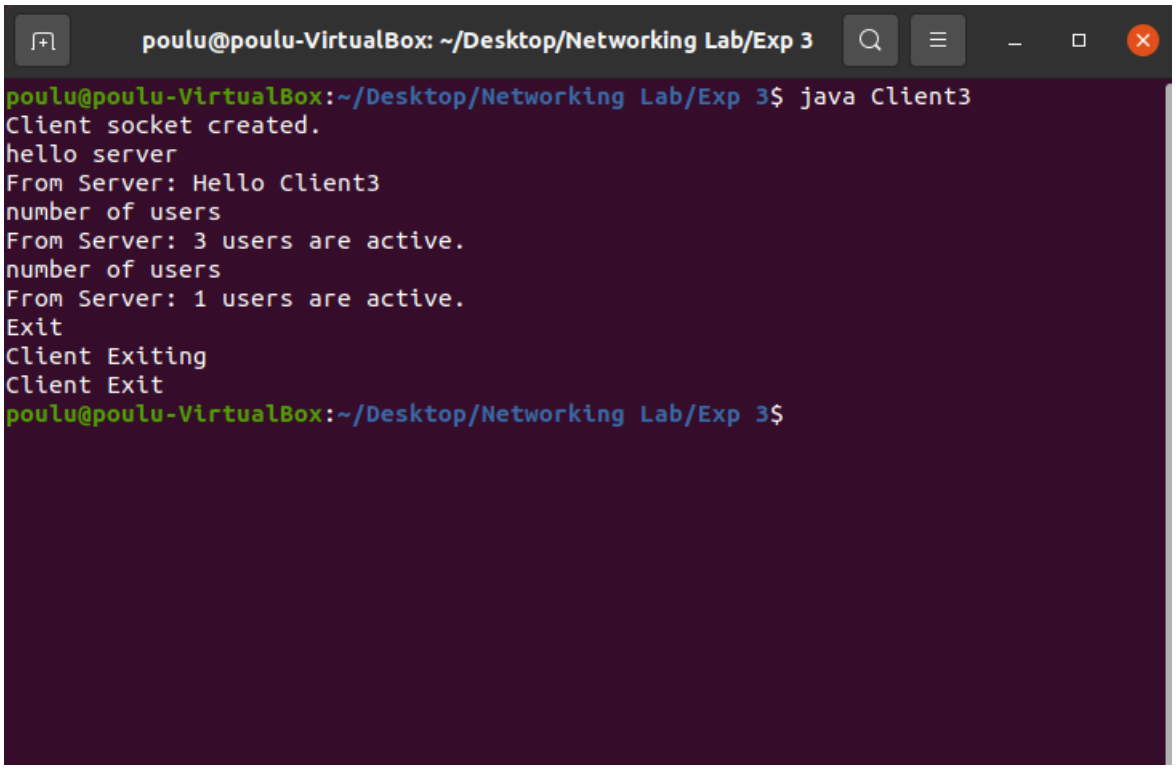
Client1:



Client2:



Client3:


poulu@poulu-VirtualBox: ~/Desktop/Networking Lab/Exp 3
poulu@poulu-VirtualBox:~/Desktop/Networking Lab/Exp 3$ java Client3
Client socket created.
hello server
From Server: Hello Client3
number of users
From Server: 3 users are active.
number of users
From Server: 1 users are active.
Exit
Client Exiting
Client Exit
poulu@poulu-VirtualBox:~/Desktop/Networking Lab/Exp 3$