

Write a TCP server and a client for the following.

1. The Server as a command line argument accepts the port number to which it should bind. (1 mark)
2. The client, as command line arguments, accepts the IP address and the port number at which it will find the server.(1 mark) Start 3 separate instances of the client at this step.
3. After connecting to the server, each client reads a line from the standard input and sends it to the server. (1 mark)
4. The server prints the received line in reverse order along with IP address and port number from which it received the message (2 marks). The server then reads a line from standard input and sends it to all the clients. (1 mark)
5. The client prints the received line in reverse order and are ready to accept a new line from the user. (2 marks)
6. The client exits if the user types "exit". (1 mark)
7. The server at a time accepts utmost 4 clients. Any client above the limits is rejected (4 marks). And when the number is less than the limit then the server accepts the new client (2 marks). Show this with 6 instances of client.

Properly comment your code (1 mark)

Provide screenshots of all client and server instances in step 1 to 7. (1 mark)