Computer Networks Lab (0-0-3)
Assignment 03_B
[Unix/Linux Socket Programming]
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Readme file

How to run:

- Open 5 terminals(one will be a server and the other 4 will be clients)
    - Note: terminals need not be on the same machine
    - Note: it does not need 5 terminals you can use n terminals where n <= 10
- Compline the server code and run it in one terminal by running the following command
    - gcc server.c -o server && ./server _PORT_
    - Example: gcc server.c -o server && ./server 1235
- Compile the client codes in the other 4 terminals by running the following command
    - gcc client.c -o client && ./client _SERVER-IP-ADDRESS_ _SERVER-PORT_
    - Example: gcc client.c -o client && ./client 10.10.75.20 1235
- Use the following format to interact with the server
    - ~list (to see the list of free users)
        - Example: ~list
    - ~connect_to_$userid (to connect to a user with user-id $userid)
        - Example: ~connect_to_03
    - ~stop (to stop the chat and log off the session)
        - Example: ~stop
    - ~quit (to disconnect from server)
        - Example: ~quit
    - ~my_id (to know user id)
        - Example: ~my_id
    - $message (to send any message $message)

    - Note: the size of the message should be less than 200 characters and don't use spaces
        - Example: hello_user_03_how_are_you
- Note:
    - one user can able to receive messages from other users only after sending the message.
    - Chatting happens by alternatively sending one message only between two users.
    - The server will log the active user when a new user joins or quit.
    - The server will log the session when two users connect for a chat or they logged out of the session.
    - Use only the ~quit command to quit from the server in the user otherwise, the server might crash
    - If any issue then restart the server and the clients