

Homework-I

# Socket Programming

# A stream-based messaging service

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- During connection, the client and the server repeat the following operations several times until the user presses 'bye\n'

## [Client]

- The Client process stores the messages from the user in queue, until the user presses 'Q\n'.
- When receiving 'Q\n', the client sends 'SEND', the queued messages, and 'RECV'

## [Server]

- When the sever receives 'SEND', it queues the messages until receiving 'RECV'.
  - When receiving 'RECV', the server process sends all received messages orderly to the client
- When the user presses 'bye\n', the client sends 'Echo\_CLOSE' to the server.
  - When receiving 'Echo\_CLOSE', the server replies with 'Echo\_CLOSE' and closes the connection with the corresponding client.
  - The client that has received 'Echo\_CLOSE' closes the connection.

