

# Report

Brief description of how my system work

## 1. Client procedure

- (1) Create a listening socket with certain port, used in p2p session.
- (2) When login, send the p2p port number to the server.
- (3) Read the command from console.
- (4) Verify the command, and parse the command into a command dict, then send to the server. finally display the response string.

## 2. Server procedure

- (1) Bind the port.
- (2) Accept a client connection request. Go into the login loop first, and then go into the command processing loop to process each kinds of command

## 3. How to send the request command and response command by Socket?

- (1) All the request command and response command is string.
- (2) Package all the command and its corresponding parameter into a dictionary.
- (3) Serialize the packet into byte-sequence by json.
- (4) Send the byte-sequence through socket.