STEPS TO SETUP AND PLAY MULTIPLAYER TICTAC TOE GAME

1. Preparation and Setup

- Ensure all three laptops are connected to the same network (Wi-Fi or wired).

- Each laptop should have **Windows** or **Linux** with an IDE like **Code::Blocks** or **Visual Studio** for the C code.

- Install **Winsock library** (for Windows users) and ensure **gcc** (or a similar C compiler) is installed on all machines.

2. Configuring the Code

- **Edit the IP Address:** In the client code, update the server's IP address (127.0.0.1 by default) to the actual IP address of the server machine. The server machine will act as the host for the game.

```
server_addr.sin_addr.s_addr = inet_addr("<server-ip-address>");
```

- Ensure that the **server IP** is static and accessible across all machines (preferably use the server machine's local IP in the network).

3. Running the Server Program

- On the **server machine** (laptop 1), navigate to the project directory and compile the server program:

```
gcc server.c -o server -lws2_32
```

- Start the server program:

```
./server
```

- The server will start and listen for incoming connections from the clients.

5. Running the Client Programs

- On **laptops 2 and 3** (the client machines), compile the client program:

```
gcc client.c -o client -lws2_32
```

- Start the client program on both laptops:

```
./client
```

- Each client will attempt to connect to the server. Ensure that both clients enter their moves when prompted and that their moves are sent to the server for validation.

6. Connecting and Playing the Game

- The **server machine** will accept two incoming connections from both clients.

- The game will begin, and the server will send the game board to each client. Players take turns making their moves, and the server will update the board and send it back to all connected clients.

- Once the game finishes, the server will notify the clients whether there's a winner or if it's a draw.