

c chat\_server.c × c chat\_client.c

Users > moshika > Desktop > c chat\_server.c

```
1 #include <stdio.h>
2 #include <string.h>
3 #include <unistd.h>
4 #include <arpa/inet.h>
5
6 int main() {
7     int server_fd, client_fd;
8     char buffer[1024];
9     struct sockaddr_in server, client;
10    socklen_t client_len = sizeof(client);
11
12    server_fd = socket(AF_INET, SOCK_STREAM, 0);
13
14    server.sin_family = AF_INET;
15    server.sin_addr.s_addr = INADDR_ANY;
16    server.sin_port = htons(8080);
17
18    bind(server_fd, (struct sockaddr*)&server, sizeof(server));
19    listen(server_fd, 1);
20
21    printf("Chat Server started...\n");
22    printf("Waiting for a client to connect...\n");
23
24    client_fd = accept(server_fd, (struct sockaddr*)&client, &client_len);
25    printf("Client connected!\n");
26
27    // Receive only one message
28    recv(client_fd, buffer, sizeof(buffer), 0);
29    printf("Client: %s\n", buffer);
30
31    // Send one reply
32    char reply[] = "Hello Client, welcome to the chat!";
33    send(client_fd, reply, strlen(reply), 0);
34    printf("Server: %s\n", reply);
35
36    close(client_fd);
37    close(server_fd);
38    return 0;
39 }
```

c chat\_server.c

c chat\_client.c X

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```
1 #include <stdio.h>
2 #include <string.h>
3 #include <unistd.h>
4 #include <arpa/inet.h>
5
6 int main() {
7     int sockfd;
8     char buffer[1024];
9     struct sockaddr_in server;
10
11     sockfd = socket(AF_INET, SOCK_STREAM, 0);
12
13     server.sin_family = AF_INET;
14     server.sin_addr.s_addr = inet_addr("127.0.0.1");
15     server.sin_port = htons(8080);
16
17     connect(sockfd, (struct sockaddr*)&server, sizeof(server));
18     printf("Connected to Chat Server!\n");
19
20     // Send only one message
21     char msg[] = "Hi Server!";
22     send(sockfd, msg, strlen(msg), 0);
23     printf("You: %s\n", msg);
24
25     // Receive only one reply
26     recv(sockfd, buffer, sizeof(buffer), 0);
27     printf("Server: %s\n", buffer);
28
29     close(sockfd);
30     return 0;
31 }
```

Desktop --zsh-- 80x24

```
Last login: Sun Dec 7 00:18:27 on ttys009
moshika@Moshikas-MacBook-Air ~ % cd desktop
moshika@Moshikas-MacBook-Air desktop % gcc chat_server.c -o server
moshika@Moshikas-MacBook-Air desktop % gcc chat_client.c -o client
moshika@Moshikas-MacBook-Air desktop % ./server
```

```
Chat Server started...
Waiting for a client to connect...
Client connected!
Client: Hi Server!
Server: Hello Client, welcome to the chat!
moshika@Moshikas-MacBook-Air desktop %
```

 Desktop --zsh-- 80x24

```
Last login: Sun Dec  7 00:23:02 on ttys000
moshika@Moshikas-MacBook-Air ~ % cd desktop
moshika@Moshikas-MacBook-Air desktop % ./client
Connected to Chat Server!
You: Hi Server!
Server: Hello Client, welcome to the chat!q
moshika@Moshikas-MacBook-Air desktop %
```