

Client v. Server

make
connection

listening
limit user input
" " output
output to logs

nc localhost 12345

Java Server

```
//create a TCP server socket on port 12345
ServerSocket server =
  new ServerSocket(12345);

// wait for a connection
// blocks until something connects
Socket socket = server.accept();

// get source name and port
socket.getInetAddress().getHostName()
socket.getPort()

//get destination name and port
socket.getLocalAddress().getHostName()
socket.getLocalPort()
```

↖ bind to port

TO DO: make a Java Server
Create a server socket
Repeat forever:

wait for a connection
setup ~~streams~~ streams
send a message
reply to client messages
when client sends QUIT,
send bye
(continue waiting)

Test with netcat and the Java client from last week.

Trace the communication in wireshark. How do the packets differ from http?

loopback tcp port == 12345
How could you make it handle multiple connections at once?