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| --- |
| const net = require('net');  const server = net.createServer(socket => {  console.log('Client connected:', socket.remoteAddress, socket.remotePort);  socket.on('data', data => {  const message = data.toString().trim();  console.log('Received from client:', message);  const response = generateResponse(message);  socket.write(response);  });  socket.on('end', () => {  console.log('Client disconnected:', socket.remoteAddress, socket.remotePort);  });  });  const PORT = 12345;  server.listen(PORT, () => {  console.log(`Server listening on port ${PORT}`);  });  function generateResponse(inputMessage) {  const responses = {  hi: "Hello! How can I assist you?",  hello: "Hello! How can I assist you?",  "how are you": "I'm just a server, but I'm here to help!",  bye: "Goodbye! Have a great day!",  "": "I'm here to chat. Say something!"  };  const response = responses[inputMessage.toLowerCase()] || "I'm not sure how to respond to that.";  return response + '\n';  } |

**Server:**

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| const net = require('net');  const readline = require('readline');  const rl = readline.createInterface({  input: process.stdin,  output: process.stdout  });  const client = new net.Socket();  client.connect(12345, '127.0.0.1', () => {  console.log('Connected to server');  rl.setPrompt('You: ');  rl.prompt();  });  client.on('data', data => {  console.log('Server:', data.toString());  rl.prompt();  });  rl.on('line', line => {  client.write(line);  });  rl.on('close', () => {  console.log('Connection closed');  client.end();  });  client.on('close', () => {  console.log('Disconnected from server');  process.exit(0);  }); |

**Client:**

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| **Server:**  Server listening on port 12345  Client connected: ::ffff:127.0.0.1 54420  Received from client: hello  Received from client: how are you  **Client:**  Connected to server  You: hello  Server: Hello! How can I assist you?  You: how are you  Server: I'm just a server, but I'm here to help! |

**Output:**