Answer the following questions:

1. (10 points) Suppose you run the TCP client without starting the server. What happens exactly and why?

The client sends back an error message stating that the server cannot be found. Simply put, as there is no server to receive the request and acknowledgment of the client. It simply resets until the server can be found

2. (10 points) What is a local host, and how is it used to develop networked applications?

The local host is the current client making the request to the server of another network, it can test out server and network connections on its own by making a part of the original client into a self-contained server that can be communicated with.

3. (Research question- 5points) what a time.sleep() does in python?

It is used to add in delay functions to code in python, once the specified time in the code has passed, the rest of the code executes

4. (10 points) Explain in brief about the following system call in python:

a. bind() Connects the hosts address and port to a new socket.

b. connect() Initiates a connection to the TCP server

c. send() Data is sent between the server and the client

d. recv() Data is retrieved between the server and the client

e. accept()

Allows the server to accept the clients signals without input and waits for a valid connection

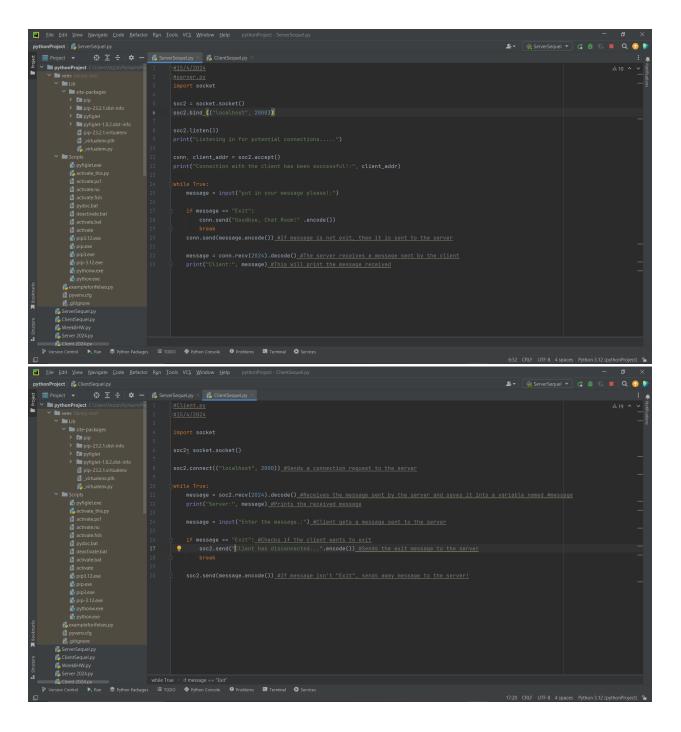
5. (15 points) Write a simple socket program in python to have one client and one server

communicating with each other, using a secure chat system. Submit the screenshot for both

the scripts and outputs (4 screenshots), in a word or pdf file.

Justin Saldivar

4/22/2024



Justin Saldivar

4/22/2024

