Assignment – TCP Server & Client communication through containers

Documentation:

Pre Requisites : Make sure docker desktop is installed on your system

1.Create 2 separate files for tcp client and server

2. **Create TCP Server Container:(In TCP Server)**

Create a C++ program that acts as a TCP server. This program listens for incoming connections, receive data from clients, and echo back the received data.

3. **Create TCP Client Container(In TCP Client)**

Create a C++ program that acts as a TCP client. This program connects to the server container, send data, and receive echoed data.

4. **Create Dockerfiles:**

Create two Dockerfiles, one for the server container and one for the client container, to build the respective images. Each folder has its respective dockerfile.

5. **Build Docker Images:**

Build Docker images for both the server and client containers.

docker build -t tcpserver-image .

docker build -t tcpclient-image .

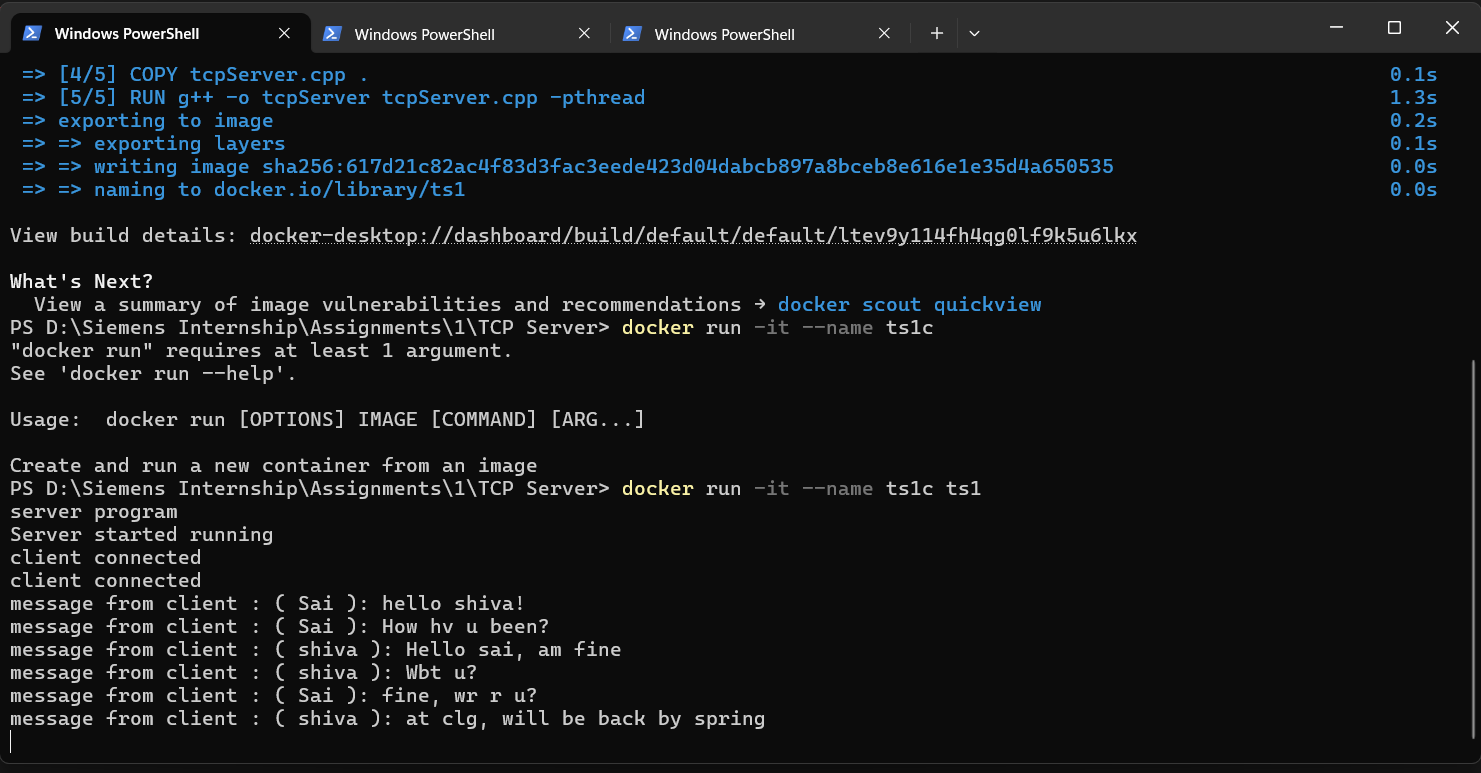
6. Run the containers in interactable format as in the images :

docker run -it --name tcpscontainer tcpsimage

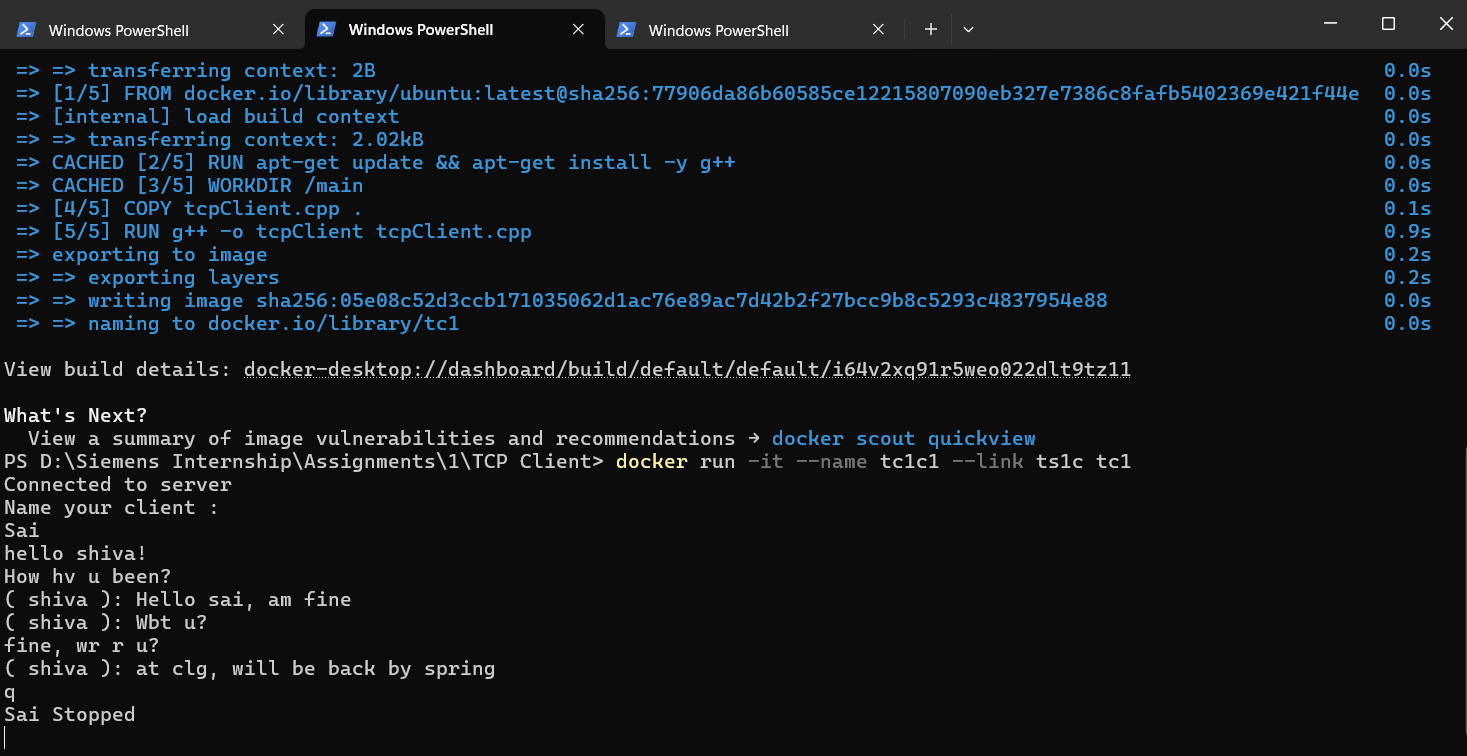
docker run -it --name tcpccontainer --link tcpscontainer tcpcimage

***Sample Demo Images :***

Server :



Client1 :



Client 2:

