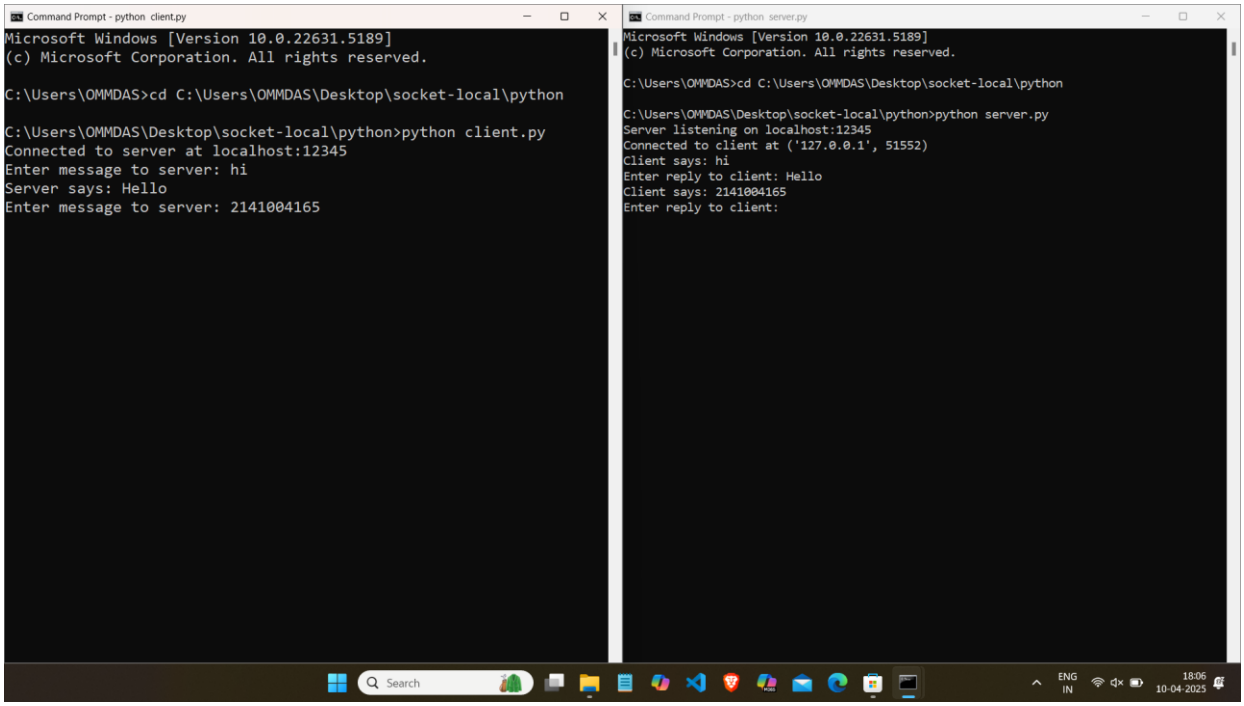
Name - Sai Subhamaya Das

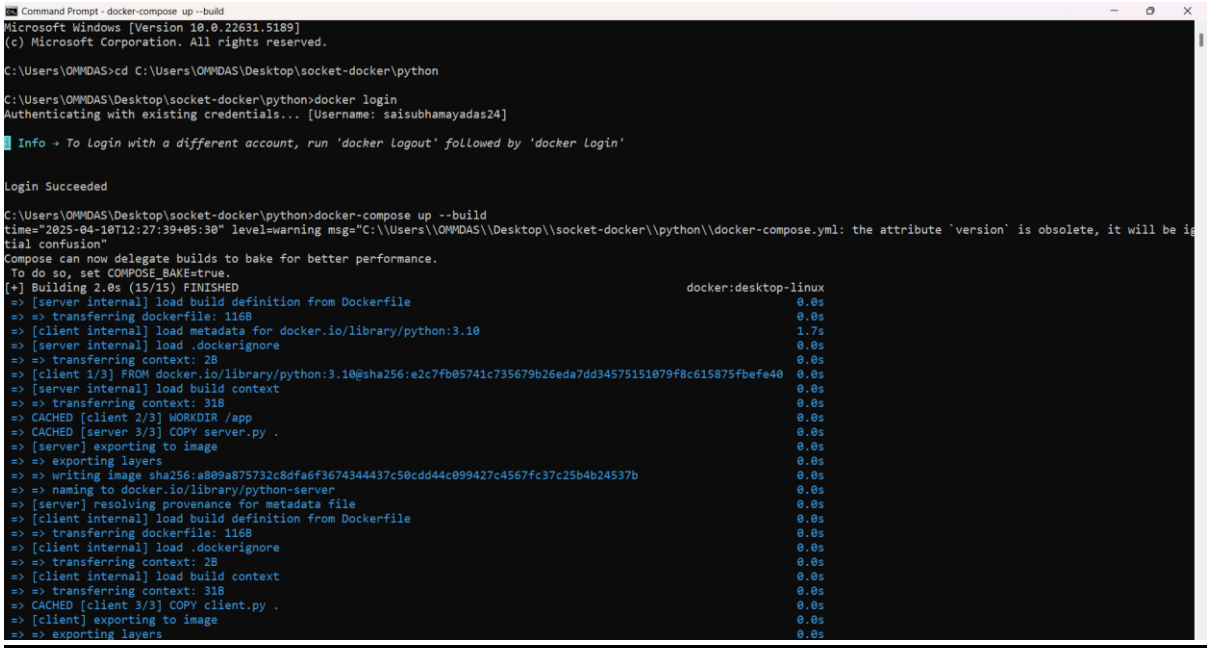
Reg no.- 2141004165

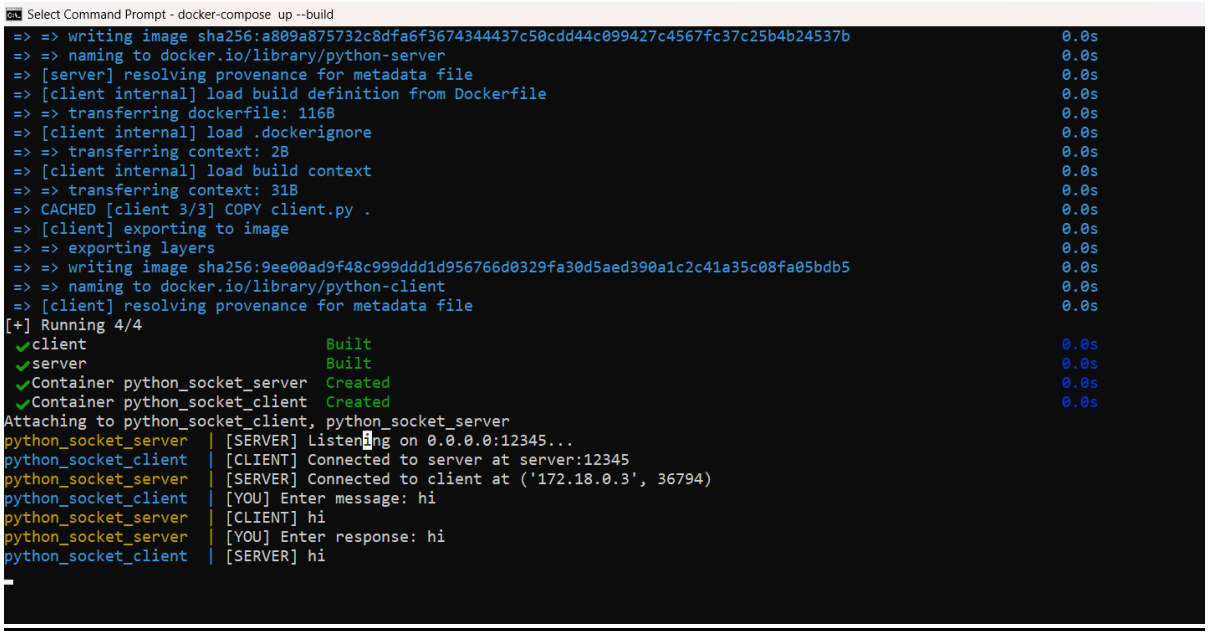
Capstone 4

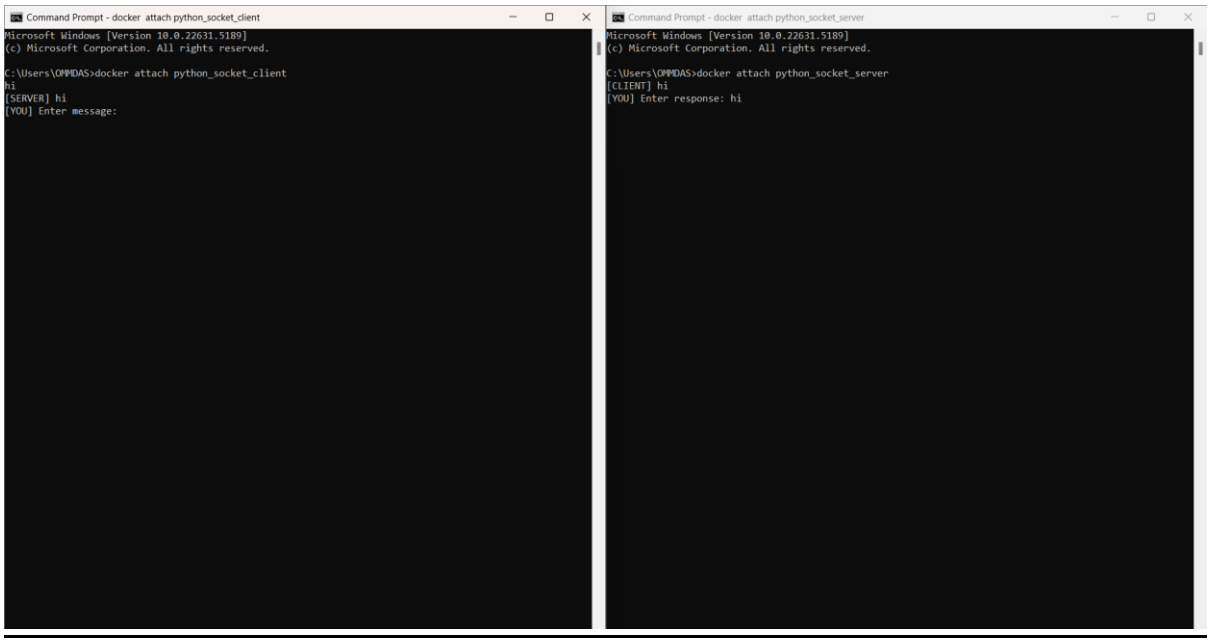
Python Local Code:

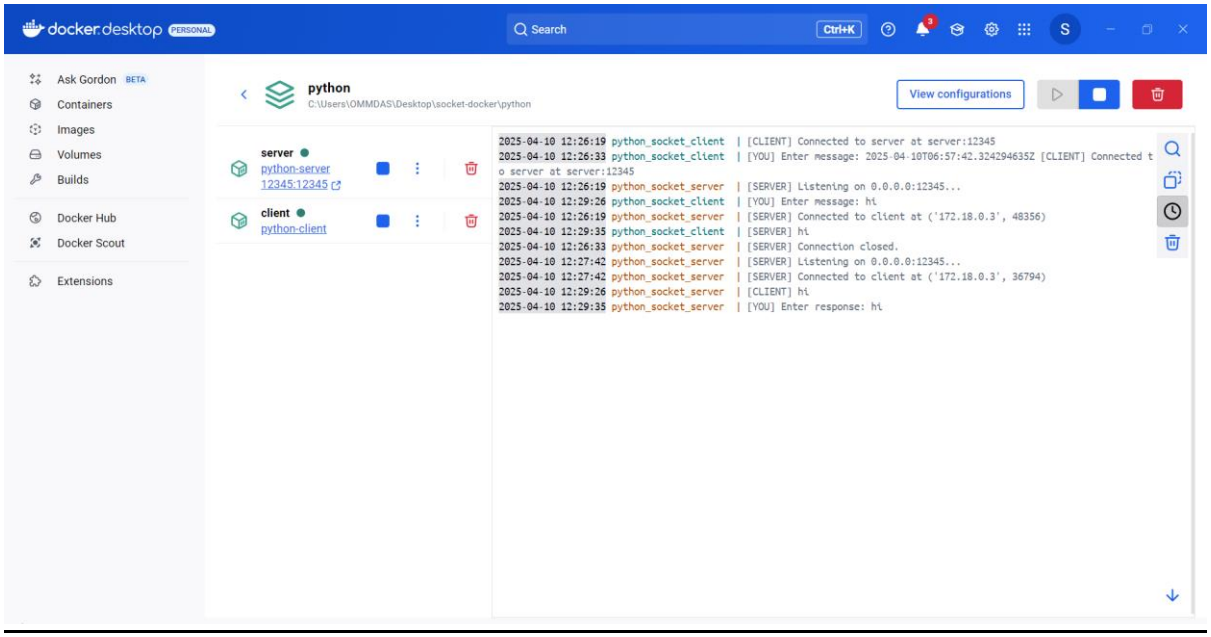


Python Docker Code:

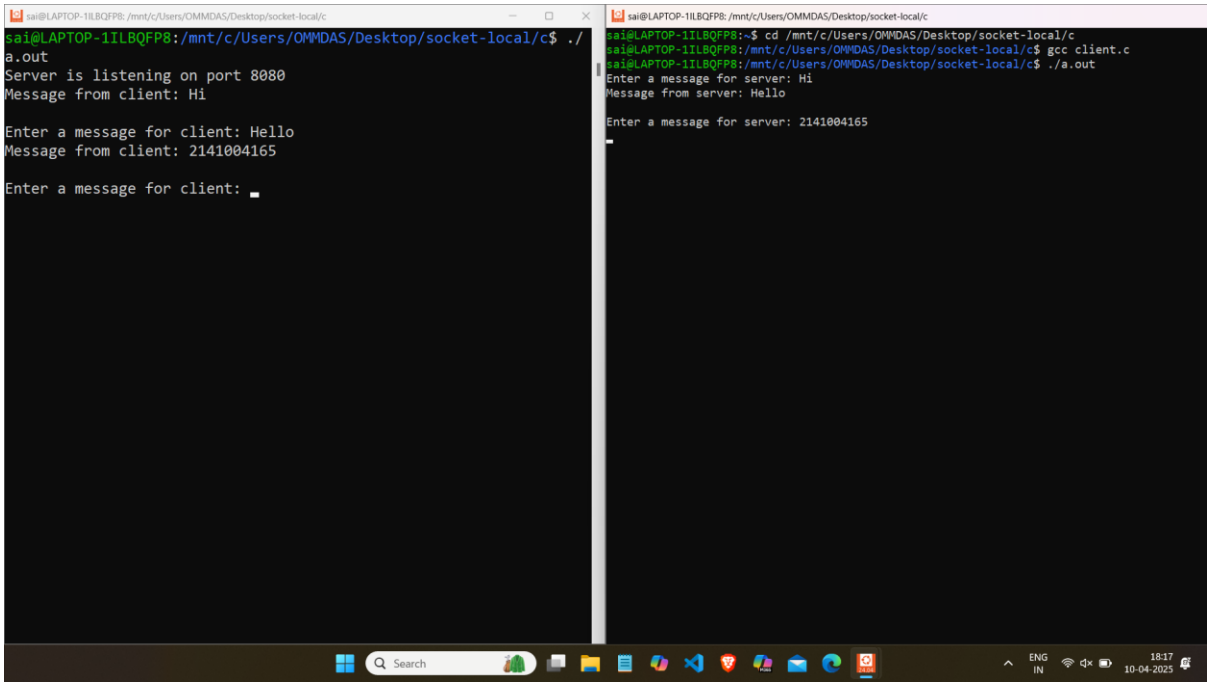



Select Command Prompt - docker-compose up --build
=> => writing image sha256:a809a875732c8dfa6f3674344437c50cdd44c099427c4567fc37c25b4b24537b 0.0s
=> => naming to docker.io/library/python-server 0.0s
=> [server] resolving provenance for metadata file 0.0s
=> [client internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 116B 0.0s
=> [client internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [client internal] load build context 0.0s
=> => transferring context: 31B 0.0s
=> CACHED [client 3/3] COPY client.py . 0.0s
=> [client] exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:9ee00ad9f48c999ddd1d956766d0329fa30d5aed390a1c2c41a35c08fa05bdb5 0.0s
=> => naming to docker.io/library/python-client 0.0s
=> [client] resolving provenance for metadata file 0.0s
[+] Running 4/4
client Built 0.0s
server Built 0.0s
Container python_socket_server Created 0.0s
Container python_socket_client Created 0.0s
Attaching to python_socket_client, python_socket_server
python_socket_server | [SERVER] Listening on 0.0.0.0:12345...
python_socket_client | [CLIENT] Connected to server at server:12345
python_socket_server | [SERVER] Connected to client at ('172.18.0.3', 36794)
python_socket_client | [YOU] Enter message: hi
python_socket_server | [CLIENT] hi
python_socket_server | [YOU] Enter response: hi
python_socket_client | [SERVER] hi

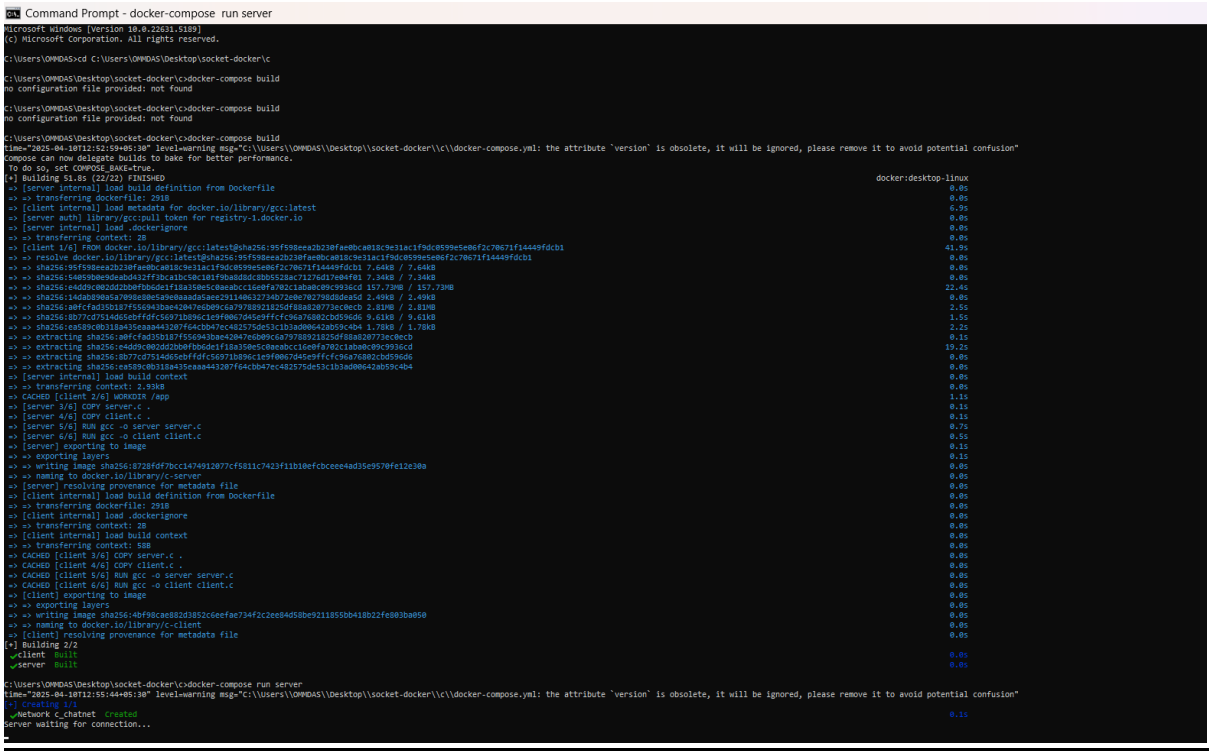

Command Prompt - docker attach python_socket_client
Microsoft Windows [Version 10.0.22631.5189]
(c) Microsoft Corporation. All rights reserved.
C:\Users\OMMDAS>docker attach python_socket_client
hi
[SERVER] hi
[YOU] Enter message:
Command Prompt - docker attach python_socket_server
Microsoft Windows [Version 10.0.22631.5189]
(c) Microsoft Corporation. All rights reserved.
C:\Users\OMMDAS>docker attach python_socket_server
[CLIENT] hi
[YOU] Enter response: hi

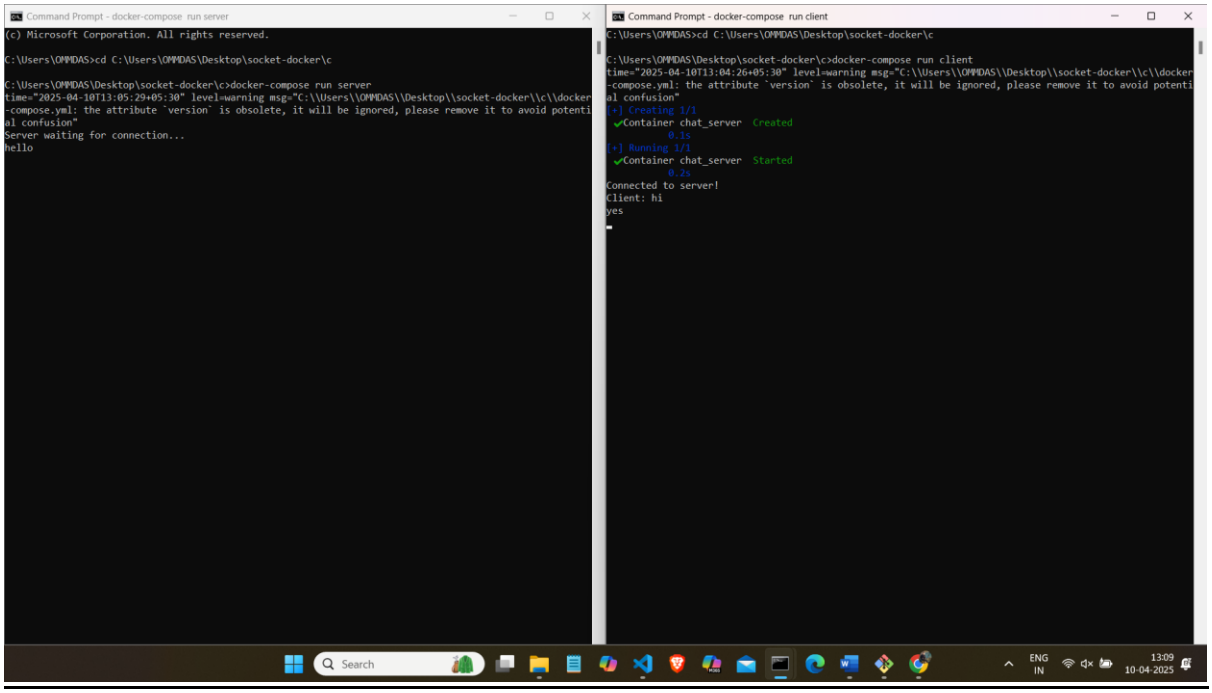

docker desktop PERSONAL
Search Ctrl+K
Ask Gordon BETA
Containers
Images
Volumes
Builds
Docker Hub
Docker Scout
Extensions
python
C:\Users\OMMDAS\Desktop\socket-docker\python
View configurations
server
python-server
12345:12345
client
python-client
2025-04-10 12:26:19 python_socket_client | [CLIENT] Connected to server at server:12345
2025-04-10 12:26:33 python_socket_client | [YOU] Enter message: 2025-04-10T06:57:42.324294635Z [CLIENT] Connected t
o server at server:12345
2025-04-10 12:26:19 python_socket_server | [SERVER] Listening on 0.0.0.0:12345...
2025-04-10 12:29:26 python_socket_client | [YOU] Enter message: hi
2025-04-10 12:26:19 python_socket_server | [SERVER] Connected to client at ('172.18.0.3', 48356)
2025-04-10 12:29:35 python_socket_client | [SERVER] hi
2025-04-10 12:26:33 python_socket_server | [SERVER] Connection closed.
2025-04-10 12:27:42 python_socket_server | [SERVER] Listening on 0.0.0.0:12345...
2025-04-10 12:27:42 python_socket_server | [SERVER] Connected to client at ('172.18.0.3', 36794)
2025-04-10 12:29:26 python_socket_server | [CLIENT] hi
2025-04-10 12:29:35 python_socket_server | [YOU] Enter response: hi

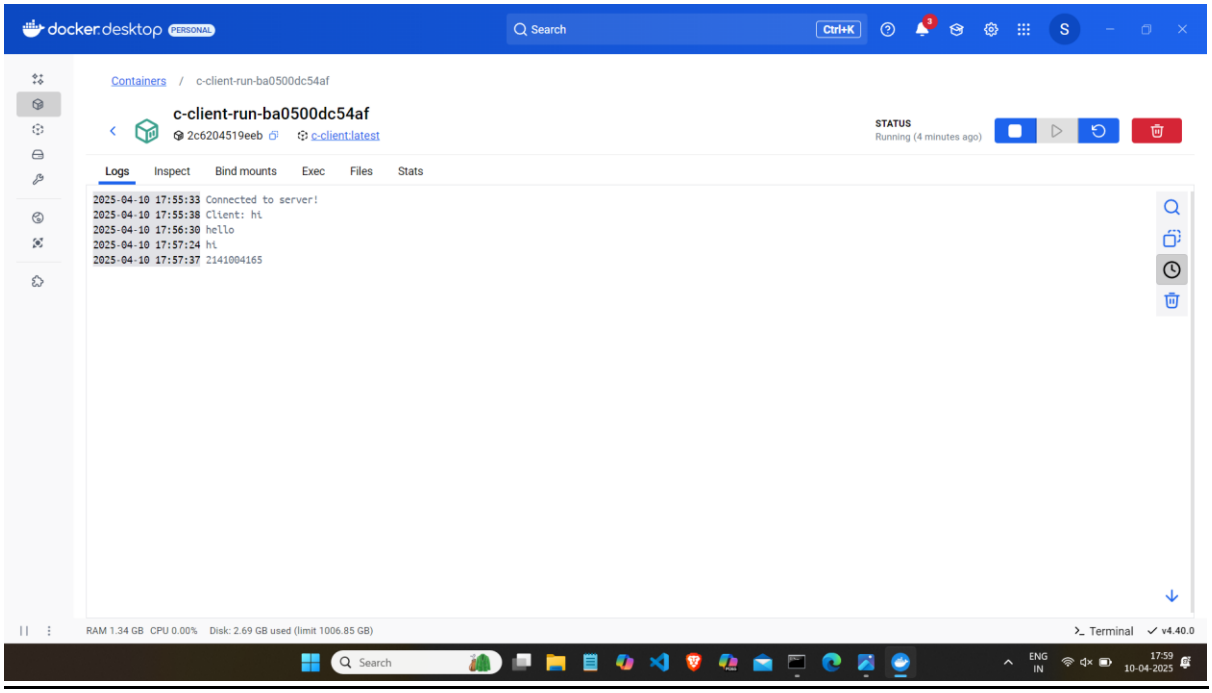
C Local Code:


sai@LAPTOP-1ILBQFP8:/mnt/c/Users/OMMDAS/Desktop/socket-local/c$ ./
a.out
Server is listening on port 8080
Message from client: Hi
Enter a message for client: Hello
Message from client: 2141004165
Enter a message for client:
sai@LAPTOP-1ILBQFP8:~$ cd /mnt/c/Users/OMMDAS/Desktop/socket-local/c
sai@LAPTOP-1ILBQFP8:/mnt/c/Users/OMMDAS/Desktop/socket-local/c$ gcc client.c
sai@LAPTOP-1ILBQFP8:/mnt/c/Users/OMMDAS/Desktop/socket-local/c$ ./a.out
Enter a message for server: Hi
Message from server: Hello
Enter a message for server: 2141004165
Search
ENG
IN
18:17
10-04-2025

C Docker Code:






docker desktop
PERSONAL
Search
Ctrl+K
Containers / c-client-run-ba0500dc54af
c-client-run-ba0500dc54af
2c6204519eeb
c-client:latest
STATUS
Running (4 minutes ago)
Logs
Inspect
Bind mounts
Exec
Files
Stats
2025-04-10 17:55:33 Connected to server!
2025-04-10 17:55:38 Client: hi
2025-04-10 17:56:30 hello
2025-04-10 17:57:24 hi
2025-04-10 17:57:37 2141004165
RAM 1.34 GB CPU 0.00% Disk: 2.69 GB used (limit 1006.85 GB)
Terminal
v4.40.0
Search
ENG
IN
17:59
10-04-2025