

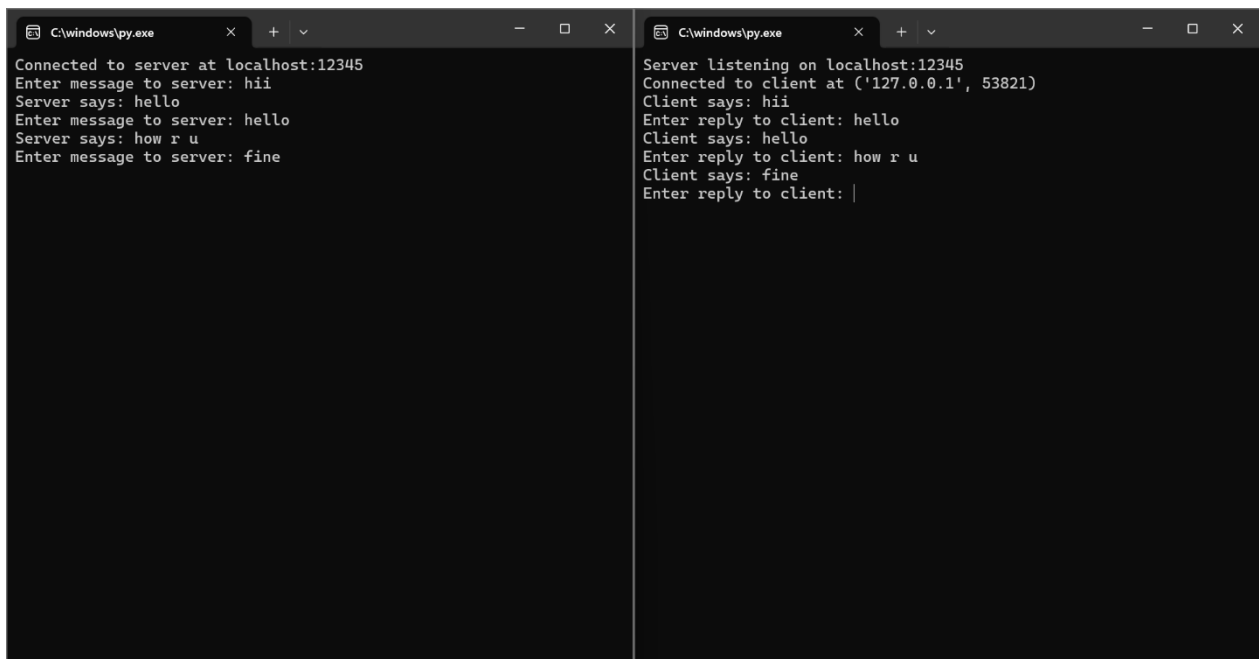
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CAPSTONE PROJECT 4

PYTHON:

1. Python Local:



```
C:\windows\py.exe x + v - □ x
Connected to server at localhost:12345
Enter message to server: hii
Server says: hello
Enter message to server: hello
Server says: how r u
Enter message to server: fine

C:\windows\py.exe x + v - □ x
Server listening on localhost:12345
Connected to client at ('127.0.0.1', 53821)
Client says: hii
Enter reply to client: hello
Client says: hello
Enter reply to client: how r u
Client says: fine
Enter reply to client: |
```

2. Python Docker:

```
Command Prompt - docker-c x + -
=> => exporting layers 0.0s
=> => writing image sha256:08539ba7de774c58d8fd6fc9120c930c07b2f3b75c52170a745c4f2b326367df 0.0s
=> => naming to docker.io/library/python-client 0.0s
=> [client] resolving provenance for metadata file 0.0s
[+] Running 5/5
✔client Built 0.0s
✔server Built 0.0s
✔Network python_default Created 0.0s
✔Container python_socket_server Created 0.1s
✔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_server | [SERVER] Connected to client at ('172.18.0.3', 58062)
python_socket_client | [CLIENT] Connected to server at server:12345
python_socket_client | [YOU] Enter message: Hi
python_socket_server | [CLIENT] Hi
python_socket_server | [YOU] Enter response: Hello
python_socket_client | [SERVER] Hello

View in Docker Desktop View Config Enable Watch
```

```
Windows PowerShell
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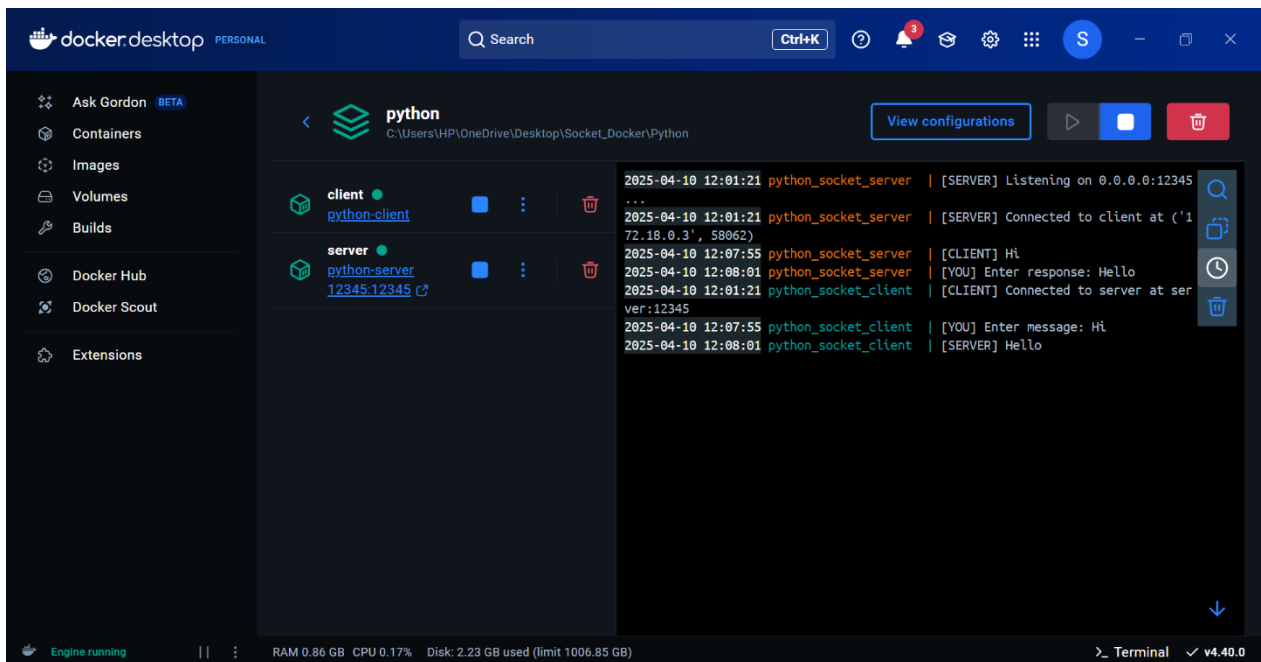
Install the latest PowerShell for new features and improvements!
https://aka.ms/PSWindows

PS C:\Users\HP> docker attach python_socket_client
Hi
[SERVER] Hello
[YOU] Enter message:
```

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements!
https://aka.ms/PSWindows

PS C:\Users\HP> docker attach python_socket_server
[CLIENT] Hi
[YOU] Enter response: Hello
```



C

1.C Local:

```
shipra@Shipra: ~/Desktop/Socket-Local/C
shipra@Shipra:~/Desktop/Socket-Local/C$ gcc server.c -o server
shipra@Shipra:~/Desktop/Socket-Local/C$ ./server
Server is listening on port 8080
Message from client: Hi
Enter a message for client: Hello

shipra@Shipra:~/Desktop/Socket-Local/C$ gcc client.c -o client
shipra@Shipra:~/Desktop/Socket-Local/C$ ./client
Enter a message for server: Hi
Message from server: Hello
Enter a message for server: 
```

2.C Docker:

```
Windows PowerShell
PS C:\Users\HP> docker build -t chat_server .
[+] Building 2/2
✔ client Built 0.0s
✔ server Built 0.0s
PS C:\Users\HP> docker-compose up
[+] Creating 1/1
✔ Container chat_server Created 0.1s
[+] Running 1/1
✔ Container chat_server Started 0.3s
Connected to server!
Client: Hi
```

