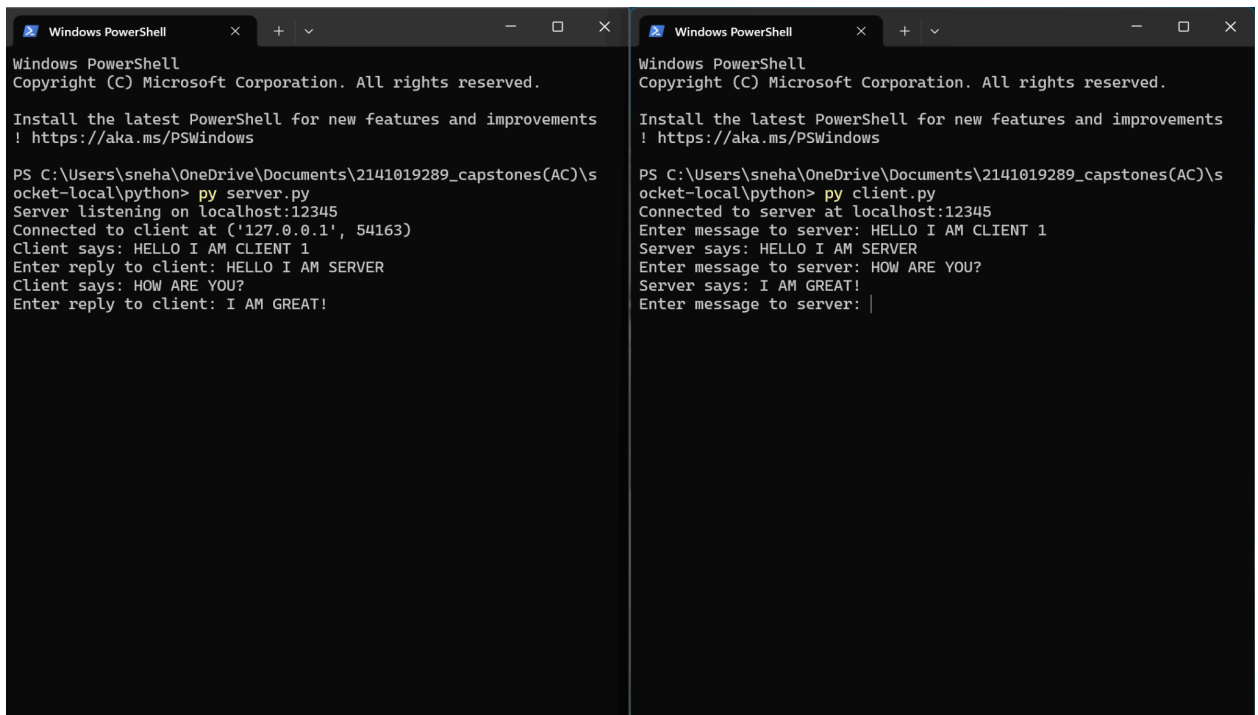


Name - Sneha Subhashree
Regd no - 2141019389

Capstone - 4

- socket-local

Python



```
Windows PowerShell
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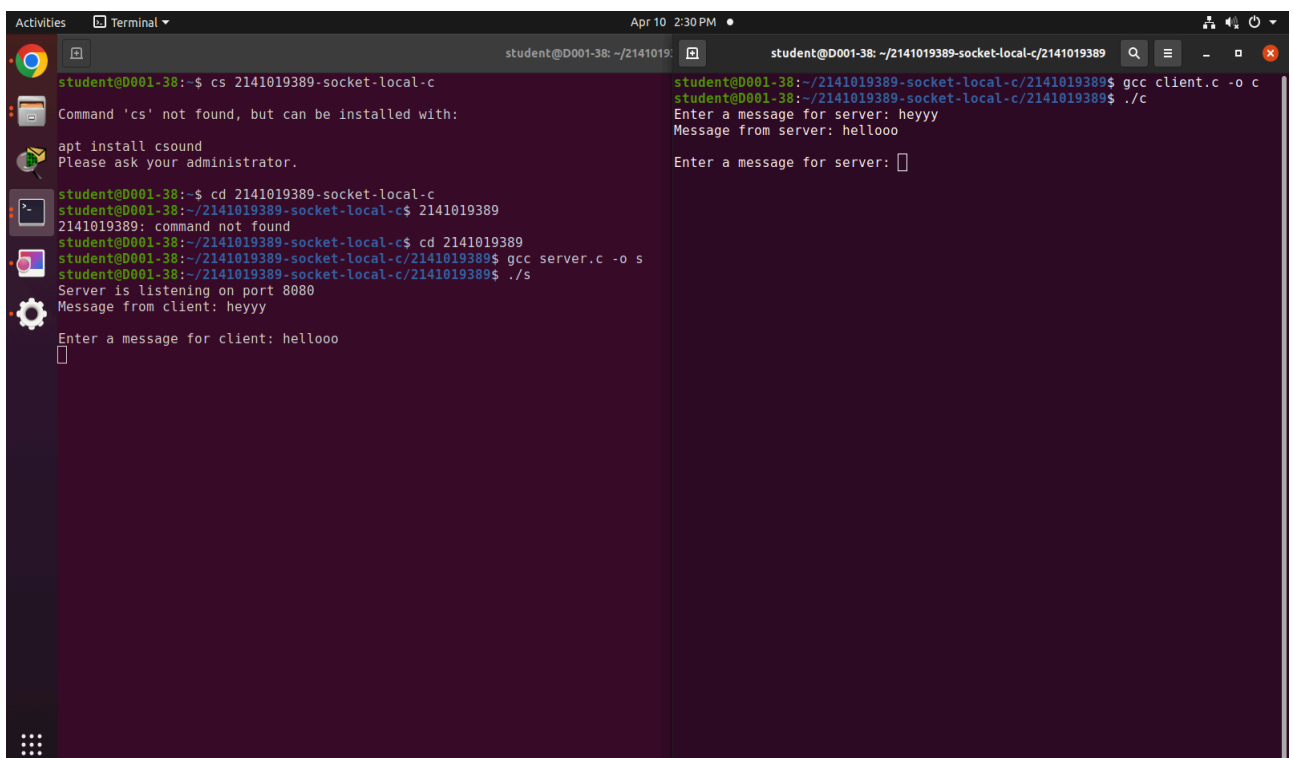
PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\s
ocket-local\python> py server.py
Server listening on localhost:12345
Connected to client at ('127.0.0.1', 54163)
Client says: HELLO I AM CLIENT 1
Enter reply to client: HELLO I AM SERVER
Client says: HOW ARE YOU?
Enter reply to client: I AM GREAT!

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PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\s
ocket-local\python> py client.py
Connected to server at localhost:12345
Enter message to server: HELLO I AM CLIENT 1
Server says: HELLO I AM SERVER
Enter message to server: HOW ARE YOU?
Server says: I AM GREAT!
Enter message to server: |
```

C



```
student@D001-38: ~/$ cs 2141019389-socket-local-c
Command 'cs' not found, but can be installed with:
apt install csound
Please ask your administrator.

student@D001-38: ~/$ cd 2141019389-socket-local-c
student@D001-38: ~/2141019389-socket-local-c$ 2141019389
2141019389: command not found
student@D001-38: ~/2141019389-socket-local-c$ cd 2141019389
student@D001-38: ~/2141019389-socket-local-c/2141019389$ gcc server.c -o s
student@D001-38: ~/2141019389-socket-local-c/2141019389$ ./s
Server is listening on port 8080
Message from client: heyyy
Enter a message for client: hellooo

student@D001-38: ~/2141019389-socket-local-c/2141019389$ gcc client.c -o c
student@D001-38: ~/2141019389-socket-local-c/2141019389$ ./c
Enter a message for server: heyyy
Message from server: hellooo
Enter a message for server: |
```

- socket-docker

Python

```
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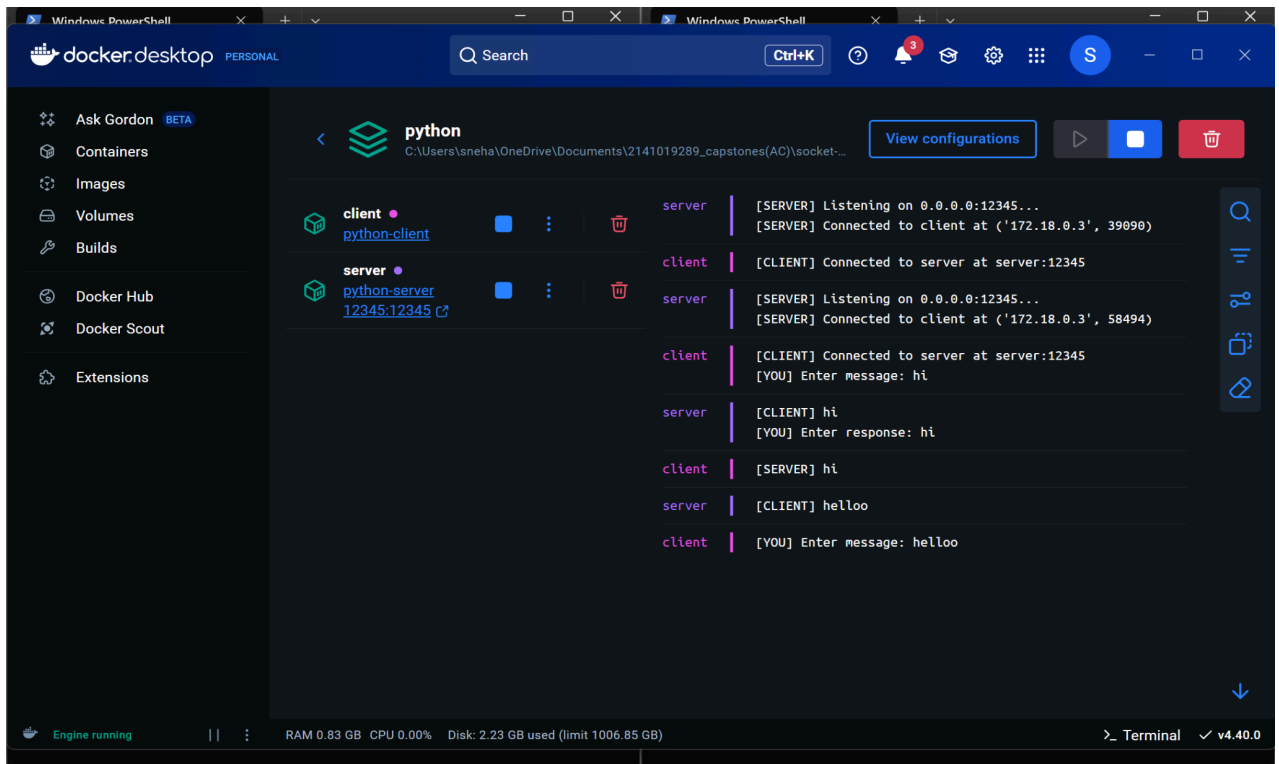
PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\socket-docker\python> docker attach python_socket_server
[CLIENT] hi
[YOU] Enter response: hi
[CLIENT] hello
[YOU] Enter response:
```

```
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! https://aka.ms/PSWindows

PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\socket-docker\python> docker attach python_socket_client
[SERVER] hi
[YOU] Enter message: hello
```

```
Windows PowerShell
=> => 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_server | [SERVER] Connected to client at ('172.18.0.3', 58494)
python_socket_client | [CLIENT] Connected to server at server:12345
python_socket_client | [YOU] Enter message: hi
python_socket_server | [CLIENT] hi
python_socket_client | [SERVER] hi
python_socket_server | [YOU] Enter response: hi
python_socket_client | [YOU] Enter message: hello
python_socket_server | [CLIENT] hello
```



C

```
Windows PowerShell
s! https://aka.ms/PSWindows

PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\socket-docker>c> docker-compose run server
time="2025-04-10T14:45:26+05:30" level=warning msg="C:\\Users\\sneha\\OneDrive\\Documents\\2141019289_capstones(AC)\\socket-docker\\c\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Creating 1/1
  ✓Network c_chatnet Created 0.1s

Server waiting for connection...

Windows PowerShell
PS C:\Users\sneha\OneDrive\Documents\2141019289_capstones(AC)\socket-docker>c> docker-compose run client
time="2025-04-10T14:45:36+05:30" level=warning msg="C:\\Users\\sneha\\OneDrive\\Documents\\2141019289_capstones(AC)\\socket-docker\\c\\docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it to avoid potential confusion"
[+] Creating 1/1
  ✓Container chat_server Created 0.1s
[+] Running 1/1
  ✓Container chat_server Started 0.2s

Connected to server!
Client: hiii

Windows PowerShell
E => [client internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [client internal] load build context 0.0s
=> => transferring context: 58B 0.0s
=> CACHED [client 3/6] COPY server.c . 0.0s
=> CACHED [client 4/6] COPY client.c . 0.0s
=> CACHED [client 5/6] RUN gcc -o server server.c 0.0s
=> CACHED [client 6/6] RUN gcc -o client client.c 0.0s
=> [client] exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:48ad7f6d547199dfd1e52842e2ec9c3240b8da17fe5989c36ec86f13d28e6c5a 0.0s
=> => naming to docker.io/library/c-client 0.0s
=> [client] resolving provenance for metadata file 0.0s
[+] Building 2/2
  ✓client Built 0.0s
  ✓server Built 0.0s
```

