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ASSIGNMENT 6

Develop chat room application using multithreading

Source Code

FILE 1: Server.py

```python
import socket
import sys
import time

new_socket = socket.socket()
host_name = socket.gethostname()
s_ip = socket.gethostbyname(host_name)
port = 8080

new_socket.bind((host_name, port))
print('Binding successfull')
print("This is your IP: ", s_ip)

name = input('Enter name:')
new_socket.listen(1) #NO OF CLIENTS TO BE CONNECTED

conn, add= new_socket.accept()
print("Received connection from ", add[0])
print('Connection Established. Connected From: ',add[0])

client = (conn.recv(1024)).decode()
print(client + ' has connected.')
```

```python
conn.send(name.encode())

while True:
    message = input('Me : ')
    conn.send(message.encode())
    message = conn.recv(1024)
    message = message.decode()
    print(client, ':', message)
```

FILE 2: Client.py

```python
import socket
import sys
import time

socket_server = socket.socket()
server_host = socket.gethostname()
ip = socket.gethostbyname(server_host)
sport = 8080

print('This is your IP address: ', ip)
server_host = input('Enter friend\'s IP address:')
name = input('Enter Friend\'s name: ')

socket_server.connect((server_host, sport))

socket_server.send(name.encode())
server_name = socket_server.recv(1024)
server_name = server_name.decode()

print(server_name,' has joined...')
while True:
    message = (socket_server.recv(1024)).decode()
    print(server_name, ":", message)
    message = input("Me : ")
    socket_server.send(message.encode())
```
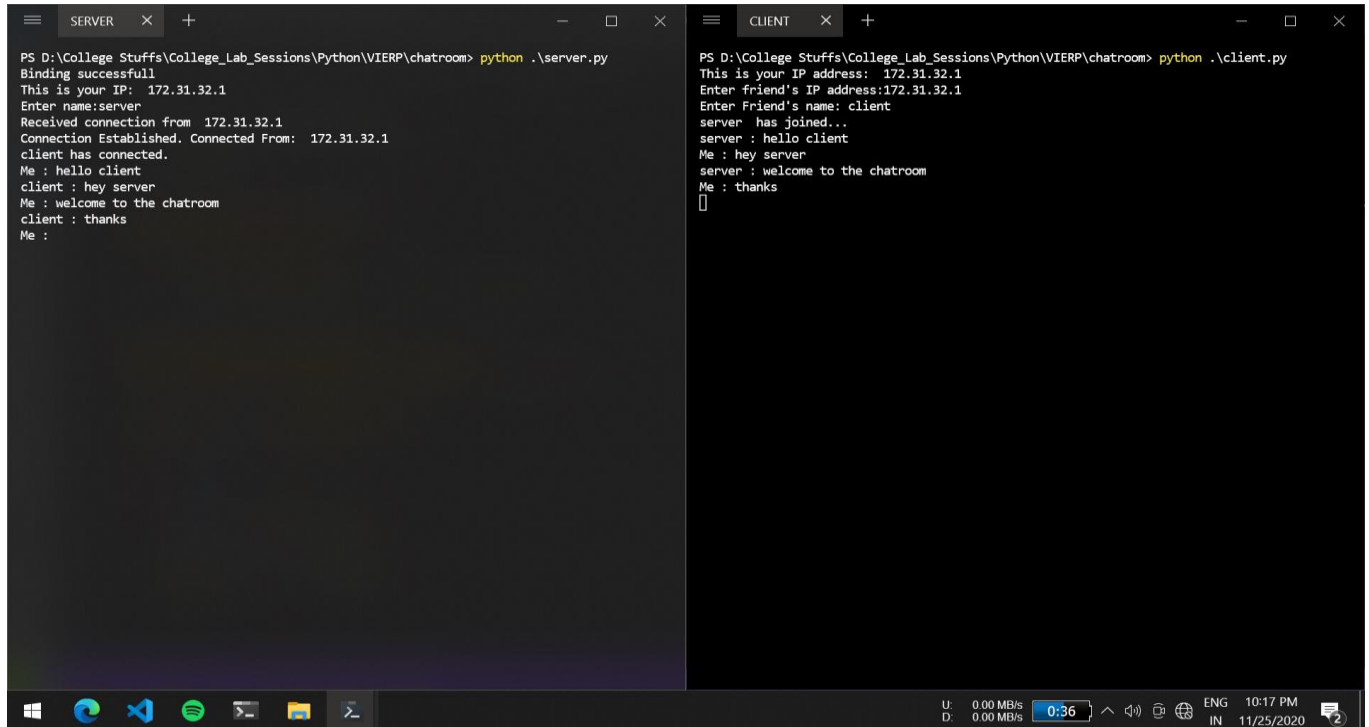
Output <Screenshot>