**Lab-1 {Create Client Server Program}**

**Create a client server {Server Code}**

import json

import socket

import threading

import os

def handle\_client(client\_socket):

request = client\_socket.recv(1024)

request = request.decode()

print(f"[\*] Received: {request}")

# Add the message to the JSON file

try:

with open("messages.json", "r") as f:

data = json.load(f)

except FileNotFoundError:

with open("messages.json", "w") as f:

json.dump({"messages": []}, f)

data = {"messages": []}

client\_socket.send(b"ACK!")

client\_socket.close()

server = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)

server.bind(("0.0.0.0", 1234))

server.listen(5)

print("[\*] Listening on 0.0.0.0:1234")

while True:

client, addr = server.accept()

print(f"[\*] Connection from {addr[0]}:{addr[1]}")

client\_handler = threading.Thread(target=handle\_client, args=(client,))

client\_handler.start()

**Client Code {}**

import socket

client = socket.socket(socket.AF\_INET, socket.SOCK\_STREAM)

client.connect(("127.0.0.1", 1234))

message = input("Enter your message: ")

client.send(message.encode())

response = client.recv(1024)

print(response)

client.close()