Exp No: 12a
22/9/25

Practical - 12 a

End - End communication at Transport Layer

Aim: a) Implement echo client server using TCP / UDP sockets

Algorithm:

```
import socket
import time
def ping_server(host = '127.0.0.1', port = 10345):
    with socket.socket(socket.AF_INET, socket.SOCK_
        DRAM) as s:
    try:
        s.sendto(b'Hello', (host, port))
    Except s.timeout:
        print("Request timed Out")
ping_server()
```

Result: The Messages hello is sucessfully sent to server.

22/9/25

6) Implement chat client server using TCP/UDP sockets

Aim: Implement chat client server using TCP/UDP sockets

Algorithm:

```
import socket
def start_server(host = '127.0.0.1', port = 12345)
with socket.socket(socket.AF_INET, socket.SOCK_
DGRAM) as s:
s.bind((host, port))
print(f"UDP server running on {host} {port}")
while true:
data, addr = s.recv from (1024)
print(f"Received Message from {addr}: {data.decode
()}")
start_server()
```

output:

```
UDP server running on 127.0.0.1:12345
Received message from ('127.0.0.1', 52345): Hello
```

Result:

This implementation of chat client server using TCP/UDP socket performed successfully.