tcp_server.py

```python
import socket
HOST = '127.0.0.1'  # Localhost
PORT = 65432        # Port to listen on
with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as server_socket:
    server_socket.bind((HOST, PORT))
    server_socket.listen()
    print(f"Server started. Listening on {HOST}:{PORT}...")
    conn, addr = server_socket.accept()
    with conn:
        print(f"Connected by {addr}")
        while True:
            data = conn.recv(1024)
            if not data:
                break
            print(f"Received: {data.decode()}")
            conn.sendall(data)  # Echo the data back to the client
```

tcp_client.py

```python
import socket
HOST = '127.0.0.1'  # The server's hostname or IP address
PORT = 65432        # The port used by the server
with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as client_socket:
    client_socket.connect((HOST, PORT))
    print("Connected to the server.")
    client_socket.sendall(b'Hello, server! This is a TCP message.')
    data = client_socket.recv(1024)
print(f"Received back: {data.decode()}")
```

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tcp.port == 65432

No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	127.0.0.1	127.0.0.1	TCP	56	52912 → 65432 [SYN] Seq=0 Win=65535 Len=0 MSS=65495 WS=256 SACK_PERM
2	0.000054	127.0.0.1	127.0.0.1	TCP	56	65432 → 52912 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=65495 WS=256 SACK_PERM
3	0.000089	127.0.0.1	127.0.0.1	TCP	44	52912 → 65432 [ACK] Seq=1 Ack=1 Win=327424 Len=0
4	0.000962	127.0.0.1	127.0.0.1	TCP	81	52912 → 65432 [PSH, ACK] Seq=1 Ack=1 Win=327424 Len=37
5	0.000998	127.0.0.1	127.0.0.1	TCP	44	65432 → 52912 [ACK] Seq=1 Ack=38 Win=2161152 Len=0
6	0.001865	127.0.0.1	127.0.0.1	TCP	81	65432 → 52912 [PSH, ACK] Seq=1 Ack=38 Win=2161152 Len=37
7	0.001893	127.0.0.1	127.0.0.1	TCP	44	52912 → 65432 [ACK] Seq=38 Ack=38 Win=327424 Len=0
8	0.001986	127.0.0.1	127.0.0.1	TCP	44	52912 → 65432 [FIN, ACK] Seq=38 Ack=38 Win=327424 Len=0
9	0.002015	127.0.0.1	127.0.0.1	TCP	44	65432 → 52912 [ACK] Seq=38 Ack=39 Win=2161152 Len=0
10	0.002149	127.0.0.1	127.0.0.1	TCP	44	65432 → 52912 [FIN, ACK] Seq=38 Ack=39 Win=2161152 Len=0
11	0.002201	127.0.0.1	127.0.0.1	TCP	44	52912 → 65432 [ACK] Seq=39 Ack=39 Win=327424 Len=0

> Frame 6: 81 bytes on wire (648 bits), 81 bytes captured (648 bits) on interface \Device\NPF_Loopback, id 0
> Null/Loopback
> Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
> Transmission Control Protocol, Src Port: 65432, Dst Port: 52912, Seq: 1, Ack: 38, Len: 37
> Data (37 bytes)

```
0000   02 00 00 00 45 00 00 4d  09 6f 40 00 80 06 00 00   ····E··M ·o@·····
0010   7f 00 00 01 7f 00 00 01  ff 98 ce b0 cd 8b 87 51   ········ ·······Q
0020   86 93 27 07 50 18 20 fa  b5 80 00 00 48 65 6c 6c   ··'·P· · ····Hell
0030   6f 2c 20 73 65 72 76 65  72 21 20 54 68 69 73 20   o, serve r! This
0040   69 73 20 61 20 54 43 50  20 6d 65 73 73 61 67 65   is a TCP  message
0050   2e                                                 .
```