TCP SOCKETS

Part-2: Wireshark Analysis

1) What are the source and destination IP addresses and ports ?

Source and Destination IP Addresses and Ports:

- **Source IP Address:** 127.0.0.1
- **Destination IP Address:** 127.0.0.1

  If packet from server to client

- **Source Port:** 2000
- **Destination Port:** 43132

  If packet from client to server

- **Source Port:** 43132
- **Destination Port:** 2000

2) **Three-way handshaking** procedure and capture all packets exchanged

Sequence Number of 1st packet = 15754323

Sequence Number of 2nd packet = 232898707

First three packets are the packets for Three-way Handshaking .
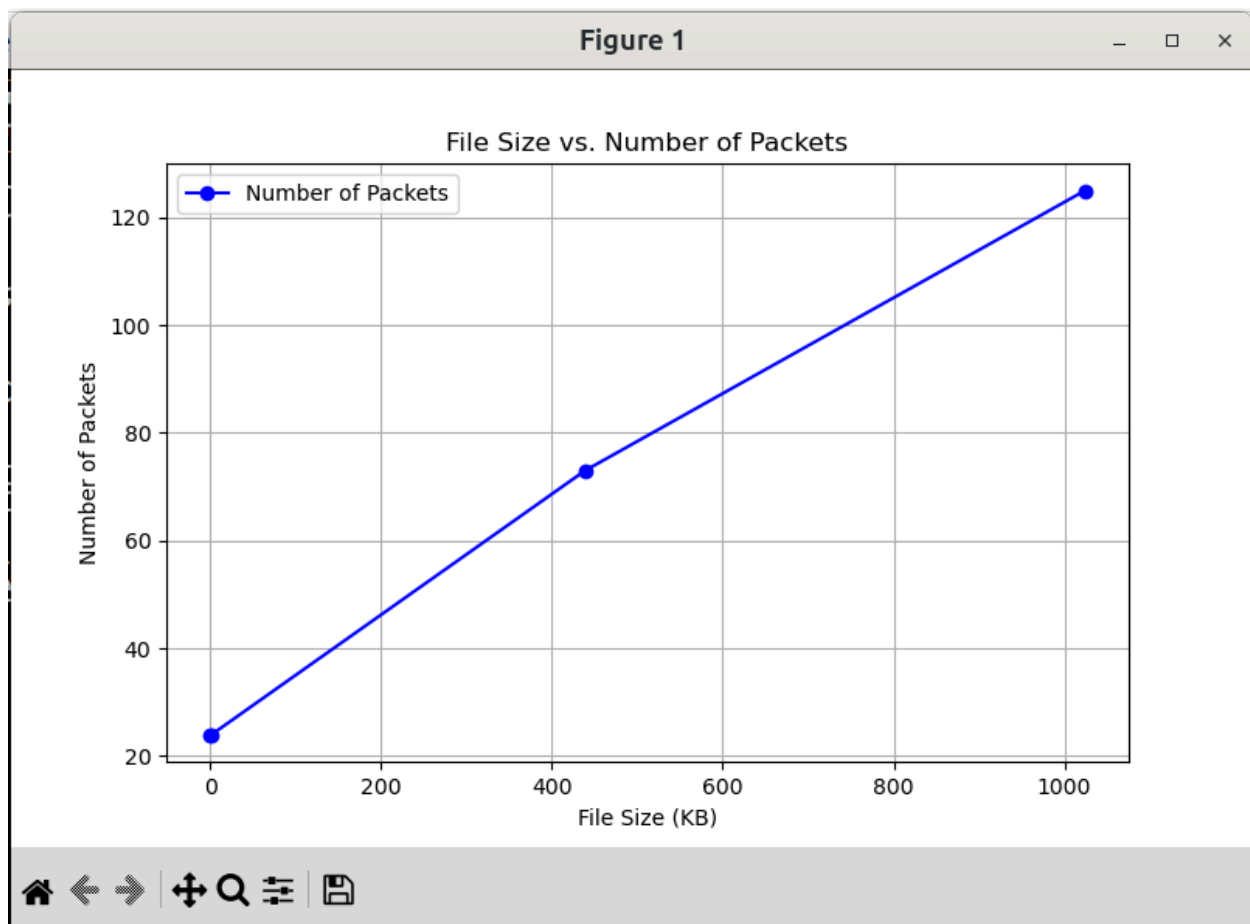
3) connection closure procedure

Last three packets are the packets for Closure Procedure.

4)

File Size	Number of Packets
13 bytes	24
2 kB	24
439 kB	73
1MB	125

5)

File Size	Start Time	End Time	Total Time
13 bytes	18.865929	18.947889	0.081960
2 kB	21.209978	21.292203	0.082225
439 kB	25.149639	25.243167	0.093528
1MB	25.895709	26.006558	0.110849

Figure 1
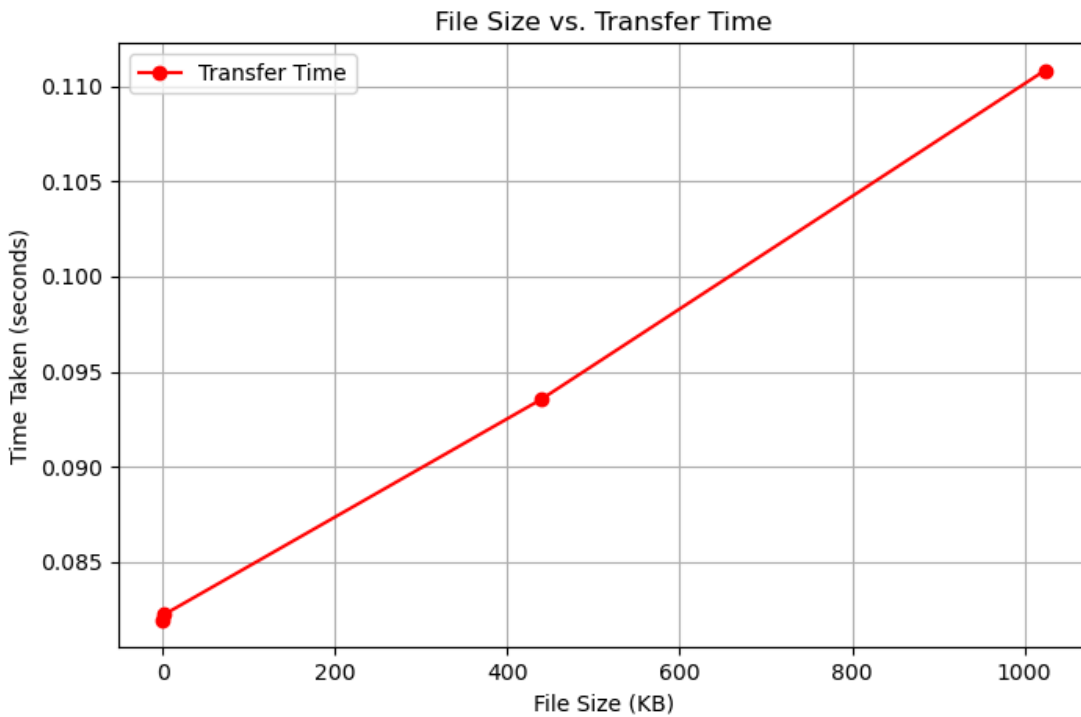
6) average size packet exchanged during the data communication ≈ 10.0099 kB/Packet