1. How many clients are there? List their IP addresses. Justify why you believe they are clients and not servers.

A.

Number of client I.P = 3

IP addresses:

192.168.56.64

192.168.56.32

127.0.0.1: 36120

Clients request for connection first. As we can see from the packet details above I.Ps initiate the connection. So they are clients.

2. How many servers are there? List their IP addresses and port numbers they are listening on. Justify why you believe they are servers and not clients.

A.

Number of servers = 1

IP addresses:Port =

192.168.56.1: 8000

Server gets the request from all the I.P's and establishes a connection.

3. What data was transmitted by each client to each servers? What the server response in each case? Enumerate them all in a table.

Source	Destination	Message
192.168.56.32	192.168.56.l	test
192.168.56.1	192.168.56.32	tset
127.0.0.1:36120	127.0.0.1:8000	temp
127.0.0.1:8000	127.0.0.1:36120	pmet
192.168.56.64	192.168.56.1	blahblah
192.168.56.1	192.168.56.64	halbhalb
192.168.56.64	192.168.56.1	yeh
192.168.56.1	192.168.56.64	hey
192.168.56.32	192.168.56.1	looc
192.168.56.1	192.168.56.32	cool
127.0.0.1:36120	127.0.0.1:8000	eh?
127.0.0.1:8000	127.0.0.1:36120	?he
127.0.0.1:36120	127.0.0.1:8000	bye
127.0.0.1:8000	127.0.0.1:36120	eyb
192.168.56.64	192.168.56.1	seeya
192.168.56.1	192.168.56.64	ayees
192.168.56.32	192.168.56.1	tata

192.168.56.1	192.168.56.32	atat

4. Based on your observations, what do you think the server's functionality is? Justify.
Whatever data client sends to server, server is revering that message data and sending it back as the reply.