

- 1) Code is present in the **q1** folder.
- 2) Yes, it works as expected. Two computers were used which belonged to the subnet on the local network. Code is present in the **q2** folder.
- 3) Code is present in the **q3** folder.
- 4) Code is present in the **q4** folder.
- 5) Yes, the “contents” of the packet (the message strings) are visible within Wireshark.
- 6) Code is present in the **q6** folder.
- 7) Stateless Protocols are the type of network protocols in which Clients send requests to the server and the server responds back according to current state. It does not require the server to retain session information or a status about each communicating partner for multiple requests. In Stateful Protocol If a client sends a request to the server then it expects some kind of response, if it does not get any response then it resends the request.
 - a) It is a “**stateless protocol**” because no information is retained.
 - b) It is a “**stateful protocol**” because information is retained such as the name of the client.
 - c) TCP is a “**stateful protocol**”.
 - d) UDP is a “**stateless protocol**”.
- 8) Code is present in the **q8** folder.