Reg.No.: 2116220701518

Practical 13

AIM:

Implement your own ping program

PROCEDURE:

🡪 **Set Up the Environment**:

* Ensure Python is installed on your system.

🡪 **Create the Server**:

* Open a new Python file and set up a UDP server.
* Configure it to bind to a specific IP address and port.
* Program it to wait for incoming messages and respond with a "Pong" message when a "Ping" is received.

**🡪Create the Client**:

* Open another Python file for the client.
* Set up the client to send a "Ping" message to the server's IP and port.
* Include a timer to measure the time taken to receive a response.
* Set a timeout in case the server does not respond.

🡪 **Run the Server**:

* Start the server script. It should be running and ready to receive pings before the client starts.

🡪 **Run the Client**:

* Execute the client script from the same or another computer on the network.
* Observe the round-trip time displayed by the client, showing the latency between the client and server.

🡪 **Test and Analyze**:

* If the client receives a "Pong" message, it will display the time taken. If no response is received within the set timeout, it will indicate a timeout.