- 1. Setup a wired LAN using Switch of minimum four computers. It includes preparation of cable, testing of cable using line tester, configuration machine using IP addresses, testing using PING utility and demonstrate the PING packets captured traces using Wireshark Packet Analyzer Tool. Also show HTML file on client using XAMPP server.
- 2. Write a program using UDP Sockets to enable file transfer between two machines. Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use C/C++)
- 3. Write a program for error detection and correction for 7/8 bits ASCII codes using CRC. Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use C/C++)
- 4. Write a program for error detection and correction for 7/8 bits ASCII codes using Hamming Codes. Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use C/C++)
- 5. Write a program to demonstrate subnetting and find the subnet masks. (Use JAVA/PYTHON)
- Write a program for DNS lookup. Given an IP address input, it should return URL and vice-versa.
 (Use JAVA/PYTHON)
- 7. Write a program to simulate Go back N Mode of Sliding Window Protocol in peer to peer mode and demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)
- 8. Write a program to simulate Selective Repeat Mode of Sliding Window Protocol in peer to peer mode and demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)
- 9. Configure RIP using packet Tracer.
- 10. Write a program using TCP sockets for wired network to implement **Multiuser Chat.**Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)

- 11. Write a program using TCP sockets for wired network to implement **Peer to Peer Chat.**Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)
- 12. Write a program using UDP sockets for wired network to implement **Multiuser Chat.**Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)
- 13. Write a program using UDP sockets for wired network to implement **Peer to Peer Chat.**Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use JAVA/PYTHON)
- 14. Write a program using TCP socket for wired network for (Any one)
 - 1. "Say Hello to Each other".
 - 2. "File transfer"
 - 3. "Calculator (Arithmetic)

Demonstrate the packets captured traces using Wireshark Packet Analyzer Tool for peer to peer mode. (Use C/C++)

15. Write a program to analyze following packet formats captured through Wireshark for wired network. 1. Ethernet 2. IP 3.TCP 4. UDP (Use C/C++)