

AIM:

To have hands-on experience in network programming and to use simulation tools to analyze network protocols.

OBJECTIVES:

- To learn socket programming
- To use simulation tools.
- To analyze the performance of protocols in different layers in computer networks using simulation tools.

Experiments in the following topics:

1. Applications using TCP Sockets like
 - a. Echo client and echo server
 - b. File transfer
 - c. Remote command execution
 - d. Chat
 - e. Concurrent server
2. Applications using UDP Sockets like
 - a. DNS
 - b. SNMP
3. Applications using Raw Sockets like
 - a. Ping
 - b. Traceroute
4. RPC
5. Experiments using simulators like OPNET:
 - a. Performance comparison of MAC protocols
 - b. Performance comparison of Routing protocols
 - c. Study of TCP/UDP performance

TOTAL= 45 PERIODS