

Implementation of concurrent time server using UDP	35
Simulate sliding window flow control protocols. (Stop and Wait, Go back N, Selective Repeat ARQ protocols)	41
Implement and simulate algorithms for Distance Vector Routing protocol or Link State Routing protocol.	64
Implement Simple Mail Transfer Protocol.	74
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Understanding the Wireshark tool.	97
Study of NS2 simulator	106

Syllabus

***Mandatory List of Exercises/ Experiments**

(Note: At least one program from each topic in the syllabus should be completed in the Lab)

1. Getting started with the basics of network configuration files and networking commands in Linux.*
2. To familiarize and understand the use and functioning of system calls used for network programming in Linux.*
3. Implement client-server communication using socket programming and TCP as transport layer protocol*
4. Implement client-server communication using socket programming and UDP as transport layer protocol*
5. Implementation of a multi user chat server using TCP as transport layer protocol.
6. Implementation of concurrent time server using UDP
7. Simulate sliding window flow control protocols.* (Stop and Wait, Go back N, Selective Repeat ARQ protocols)