Data Communication and Computer Network Laboratory

Master of Computer Application
Second Year, First Semester
Session: 2023-24

Assignment - I

Date: 03/08/2023

You may use C/C++/Java/Python for implementing solutions to the following problems.

1. Write a TCP Day-Time server program that returns the current time and date. Also write a TCP client program that sends request to the server to get the current time and date. Choose your own formats for the request/reply messages.

2. Write a TCP Math server program that accepts any valid integer arithmetic expression, evaluates it and returns the value of the expression. Also write a TCP client program that accepts an integer arithmetic expression from the user and sends it to the server to get the result of evaluation. Choose your own formats for the request/reply messages.

3. Implement a UDP server program that returns the permanent address of a student upon receiving a request from a client. Assume that, a text file that stores the names of students and their permanent addresses is available local to the server. Choose your own formats for the request/reply messages.

Your report should contain at least the following sections:

1. Problem Statement

2. Your design of request/reply protocol

3. Source code (with appropriate comments)

4. Sample run