Computer Networks

Assignment 6
Assignment given on: 08-03-2021
Due Date: 15-03-2021, on Moodle

Client-server programming using Sockets

(I) Implement the following rudimentary string processing application using connection-oriented client-server programming using C or C++. Some guidelines for the implementation are as follows.

a)   The client will send a textual paragraph terminated by '\n' to the server (assume that in the paragraph, '.' appears only at the end of sentences and nowhere else). The server will compute the number of characters, number of words, and number of sentences in the paragraph, and send these numbers back to the client. The client will print these numbers on the screen.

b)   Assume that only one client requests for service at a given time. Implement the server as an iterative server.

(II) Extend the above so that the server can handle multiple concurrent client requests, that is. The server is to be implemented as a concurrent server.

Grading: (100%)
(I) – a) 20%
(I) – b) 30%
(II) – 50%

Submission Details:
1. Please read the questions carefully and complete it.
2. The report file name should start with <Your_Roll_Number> and submit it on moodle.
3. Submit only through moodle and well in advance. Any hiccups in the moodle/Internet at the last minute is never acceptable as an excuse for late submission. Submissions through email will be ignored.
4. Submit to moodle on or before 15-03-2021 (23:55 PM)
5. Any queries related to the assignment send an email to TAs well in advance
priyash@iitdh.ac.in - Roll Number: 19001001 to 190010025,160010021,170010020
chandrashekar.s@ittdh.ac.in - 19001026 to Remaining