Computer Network Laboratory

Assignment given on: 25-07-2011

Submission deadline: 01-08-2011 (2:00 PM)

<u>Assignment 1:</u>   Client-server programming using Berkeley 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*.