

CSE431: Distributed Systems Assignment1

Deadlines: Monday 23rd 5:00 PM

Implement two types of communications between two systems:

1. Datagram socket based communication (also commonly known as UDP socket)
2. Stream sockets based communication (commonly known as TCP socket)

Implement a client-server model where, the client and server communicate using the socket. The client should read a string from standard input stream (command line). The string should be sent to server which prints it on the standard output. The server should then send back a response string (after performing any operation, for ex. switch case of all chars) to the client which should be received and printed on the client's console.

This is a simple operation that can be performed. To make it interesting you are free to perform any operations on the server based on the message sent from client and a response message should be sent back to client. Note that this should be implemented for both the sockets mentioned above. You can implement it in either C, C++ or Java. Using any external libraries is not allowed. Only the default socket libraries provided by the language are allowed.

The deadline for this assignment is Monday, 23rd January evening. The codes should be submitted on the course portal along with a readme describing the execution of your program. Note that plagiarism and copy cases will be defaulted to 0 marks.