Computer Networks 2 (CS-3543)
Lab Assignment - 3
Date: 22/01/2019

Implement a Math Server

1. Design and implement a client server application as given below.
2. The server program gets the request from the clients for performing a mathematical function (function name and arguments) and responds back with the results of the computation.
3. The clients send the request to the server at random time. So, no need to keep the connection open for a long time. So, the server closes the connection once serving the client. Server should be able to serve multiple clients at the same time.
4. Each client should send the request in a structured format to minimize the payload size. Use some encoding for the function name and arguments. (Use Structure or Class)
5. The server performs the operation based on the client request and returns the result of the computation. Implement one mathematical function of your choice under each category given below.
    a. Function with fixed number of arguments
    b. Function with variable number of arguments
    c. Function with more than 1 return value
6. The same client and server program should work for all these functions. In the client side you need to encode the payload based on user input.