Assignment 0 – Modification1

In this modification, you will be implementing a Math server using stream socket. The client will be sending predefined Math functions to the server and the server will be sending back the results of the functions to the client for displaying at the client terminal. Implement the following Math functions:

Addition, Subtraction, Multiplication, Division, Trigonometric Sin and Cos functions and Square root function.

Assume single digit numbers as arguments of arithmetic operations. The format of math expressions that client sending will be like: + 4 8, / 5 4, sin 90, sqrt 16.

Your implementation is required to have two programs, one server and a client.

You must first prepare a design document mentioning (in pseudo code notation) that how you are planning to implement the solution.

Your programs must accept destination address and port number required as command line arguments.

Compile your programs with -o option to save the object files in different names so that they can be executed in two different terminals.

The deliverable will be source code of the two programs and the design document.

You have to upload the design document and the two working source codes, zipped into a single file. The file naming convention to be followed is as follows:

<your given name>_<your roll no>_assgn0mod1_design.odt

<your given name>_<your roll no>_assgn0mod1_server.c

<your given name>_<your roll no>_assgn0mod1_client.c

<your given name>_<your roll no>_assign0mod1.tar.gz

Assignment 0 – Modification2

In this modification, your client will be sending a file name (accepted from user through command line) to your server. To make it simple, let us assume client sends only text file names. For example, *hello.txt*.

Your server will be checking the presence of the file in the current working directory and it will send the contents of the file to the client, if it exists, and the client displays it in its terminal. If the file is not present in the server's current working directory, then an error message of "File Not Found" should be send to client and the client display the same at its terminal.

Your client program must take care of handling various file sizes. Your programs must accept destination address and port number required as command line arguments.

You have to upload the design document and the two working source codes, zipped into a single file. The file naming convention to be followed is as follows:

<your given name>_<your roll no>_assgn0mod2_design.odt

<your given name>_<your roll no>_assgn0mod2_server.c

<your given name>_<your roll no>_assgn0mod2_client.c

<your given name>_<your roll no>_assign0mod2.tar.gz