

Assignment 1

Submit your code and a document that answers Q.2

1. Write a client server socket program in C. Your program should have the following feature $[2 + 2 + 2 + 4 + 4 + 2+1]$
 - a. The client initiates the connection
 - b. Takes a file name from the user
 - c. Sends the file name to the server
 - d. Server searches for the file name in its shared drive (you can assume there is only one shared folder that a client can access file from)
 - e. Server sends the file to the client
 - f. Client stores it in its local drive
 - g. Client closes the connection
2. After you have successfully run the program, collect a Wireshark trace at the client side and compute the following metrics $[2 + 2 + 2 + 2]$
 - a. How many TCP connections are made
 - b. What is the port number of the server and what is that of the client
 - c. How many packets are exchanged between client and server
 - d. How much time is needed to download the file