

CS358 2023 Assignment 5 - Socket Programming using C/C++

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Deadline: 17 Sep, 2023. 23:59. All of your git repos shall be pulled after that. That will be the version which will be checked.

Warning: Sharing is Caring is good for cat videos. Sharing of program may lead to plagiarism and would lead to both students getting 0.

Doubts: All Doubts relating to CS358 2023 Assignment shall be posted on Google Form

https://docs.google.com/forms/d/e/1FAIpQLSdVylWbeelAnQKYDCfqoyxcqSwm_FiVJDbzszV2Mpg-zZCf/viewform?usp=sf_link

I will respond to the queries here:

<https://docs.google.com/spreadsheets/d/1jHhkLLGrRSToYZH857D6hM3SY8Bi0LoTtqDZ-rNrvGw/edit?usp=sharing>

Please avoid email / wa / dm

So common doubts can be solved and we shall be able to keep track in an organized manner.

Pull This Git Repo - https://github.com/cs358/308_CS359 and copy the tut05 to your repo folder.

Git Requirements: At least 3 git commits should be there with meaningful comments (at least 4 words)

Library Requirements: You can use any library of your choice, but for evaluation you need to explain each line of code.

Tasks:

Task 1) Write a C/C++ Code using TCP protocol to send a message "Hello IITP" from client to server. The server will display the message and then send a response message "Have a good day" to the client. The client will display the response message.

Task 2) Write a C/C++ Code using TCP protocol to send a string "You must be the change you wish to see in the world" or any input to the server. The server will determine the number of vowels in the string and it will display them on the client side.

Task 3) Write a C/C++ Code using TCP protocol to send a string from client to server. On the server side, display the string first and then check if it is palindrome string. If the string is pallindrome, a message should be sent from the server to client informing that, "String is pallindrome" else "String is not pallindrome"

Task 4) Write a C/C++ Code using TCP protocol to send an integer array from client to server. On the server side, display the array and determine the sum of elements. This sum will be sent back to the client and display on the client side.

A total of 4 client codes and 1 server code shall be there.