

Extending echo client/server functions

Q-1. Integrate `getaddrinfo()` as part of your client software so that the hostname of the server can be given as the command line option. This feature must be demonstrated by showing 1) the screenshot of successful execution of your client software with hostname, and 2) the screenshot of wireshark/tcpdump to prove that your client software sends a DNS query and receives a response.

Q-2. Add at least two features to Echo Client /Server, and demonstrate them. In the report, you must describe the new features with their benefit. Significance of the features will impact the marks given.

(Example Marks)

1 Adding or recording a timestamp of a message exchange

5 Supporting IPv6 (with proper network configuration)

10 Supporting IPv6 and multicast (with extra clients)

10 Supporting SSL (with proper certificate configuration)

Submission Guideline

(Requirement of Report)

- The core idea of your answer to each question. Better visibility like screenshot of application will be appreciated.
- Reference (web sites, books, etc.) which corresponds to each answer. Answers without appropriate reference may not get mark.

(Requirement of Code)

- Human readable source code must be submitted as separate files.
- README must be included as a separate file so that TAs and instructor can compile source code and execute the binary anytime
- Submit all files as one tar ball or zip ball.

Teaming Up (mentioned in the class)

- 4 to 8 members per group
- Less students can form a team in case of difficulty to join a team.

Optionally or by mistake

If you tried on Q-3 or even bigger project rather than Q-2, you must clearly remark them in the report and the demo. The extra mark will be awarded as per the result of significance assessment by TAs and the instructor. Your work will not be wasted. Go ahead and show something fancy.