In this assignment, you will build a multi-threaded web server. The web server must be able to handle simple HTTP requests and return suitable responses. It must use a master-worker thread pool architecture to handle multiple concurrent clients, where the master thread accepts new connections and the HTTP processing is done by the worker threads in the thread pool.

Detailed instructions on how to solve this assignment, by building the server incrementally step-by-step, can be found here (please skip the parts mentioned as optional in this description).

Building a simple echo server with multi-threading:

https://github.com/cserl-iitb/bootcamp2022/tree/main/application_software/week2

Adding HTTP processing to the server:

https://github.com/cserl-iitb/bootcamp2022/tree/main/application_software/week3

Adding master-worker thread pool:

https://github.com/cserl-iitb/bootcamp2022/tree/main/application_software/week4

The above step by step instructions are only to help you solve the assignment easily. You only need to submit your final code after completing all steps above (HTTP server with worker thread pool). Place your code in a folder whose name is your roll number, tar gzip it, and upload on Moodle.

Deadline: Friday Oct 14, 11:59 pm