In this problem, you will implement a simple protocol for exchanging files and related information between a file server and a client.

The server must support the following commands received from the client:

a. listdir: Runs the ls command in the current working directory on the server, stores the result in a temporary file on the server, sends the temporary file to the client, and deletes the temporary file on the server.

b. rmvfile *some_file*: Runs the rm *some_file* command in the current working directory on the server.

c. getfile *some_file*: Sends *some_file* from the current working directory on the server to the client.

d. putfile *some_file*: Receives *some_file* from the client and creates it in the current working directory on the server.

Note: The server must run on one of the Linux machines in CL115 because it uses the fork system call.

The client must support the following commands:

a. listdir: Requests the server to send a directory listing for the current working directory on the server.

b. rmvfile *some_file*: Requests the server to delete *some_file* from the current working directory on the server.

c. getfile *some_file*: Requests the server to send *some_file* to the client from the current working directory on the server.

d. putfile *some_file*: Requests the server to receive *some_file* from the client and store it in the current working directory on the server.

e. stop: Terminates the client.