

Upload protocol:

First, client will send a command to the server, the command will have a format like this:

/upload filename.extension file_size

the server receive the command and create a new file filename with corresponding extension, then it will allocate the number of bytes it need to receive based on the file_size

Next, the client will be put in sleep mode for 2 seconds and start to read the data in the file in binary mode, then it will send all the data to the server. The server receive the data and then write it to the file it just create in binary mode

Download protocol:

First, client will send a command to the server, the command will have a format like this:

/download filename.extension

the server receives the command and get the file size of the file that the client wants to download. Then it will send the file size to the client, The client after receiving the file size will create a new file and allocate the number of bytes it need to receive. After that, the server sleeps for 2 sec, then it will open the file in reading, read all the content in the bytes mode then send it to the client. The client then receive all the data from the socket then write it into the file.