

PROGRAM 1:

This is a programming assignment in Java.

Write a simple HTTP client and a separate HTTP server application in Java. As soon as the client connects, the server will send a html or text file which is between 5 to 10K bytes in size. Close the connection once the file is transmitted.

- Make sure the files are named differently on the client and server side.
- You must use the Java socket class.
- DO NOT implement the server handling multiple requests at the same time (multi-threading).
- Implement output messages that show the flow through each method (e.g. “Connected to server” or “Receiving message from server”, etc)

Submit: Source code and sample output of the file transfer (both client and server)

1. Create the Java code and compile it.
2. Run it on your own machine with a port number specified in the command line
For example, type: `java MyServer 25000`).
If a service is already running on the port you choose, you will get a `BindException` or a similar exception. **USE THE PORTS YOU WERE ASSIGNED.**
3. In another window, use Telnet as the client program by typing a command `telnet localhost 25000` . This will test that the Server application is working.
4. Now test using the Java client by typing: `java MyClient 25000`

HINT:

To send and receive data, client and server can use Java streams - e.g. if the data is in ASCII text form, you can read messages with a `BufferedReader` using `readLine()` and write messages with a `PrintStream` using `println()` for example.