Objective

Create a network server and client.

Assignment

- Take your assignment 3 and convert it to use the network instead of running just one host.

Program: server

- Run: ./server <ip address> <port>
- The ip address and port are used to bind the server.

Program: client

- Run: ./client <ip address> <port>
- The ip address and port are used to connect to the server.

Report

- Your report must follow the format here.

Constraints

- You must use C18.
- Your program must run on ***ALL*** of Linux, macOS, or FreeBSD.
- Your program must compile with ***BOTH*** gcc and clang.
- You ***MUST*** compile with the generated makefile
- **The report must be in PDF form**.

Submission

Use the following directory structure (omit directories that are not needed):

Directory	Purpose
source	Any source code files (if applicable to the assignment)
report	Report files in **.pdf** format

You must hand in a pax.Z file to the assignment submission folder on Learning Hub (https://learn.bcit.ca).

You can hand in as many versions as you like. The last submission, based on the timestamp, will be the one to be marked. **Replace # with the actual version number of your assignment (e.g. 1, 2, 3, etc.).**

```
pax -w source/ report/ -f assign-4-v#.pax
compress -f assign-4-v#.pax
```

Hand in the resulting assign-4-v#.pax.Z file.

Note: Failure to follow the submission requirements may result in a loss of marks, up to 100%.

Demo Requirements

- You will demonstrate the project in class.

Evaluation

Topic	Value
Design	10
Testing	70
Report	20
Total	**100**

Suggestions

- listen/accept example
- connect example