

Computer Networks

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Lab 6: A client-server application for file transfer

In this lab, you will gain familiarity with socket programming by modifying the a simple client-server code provided in the textbook. *This lab is to be done individually.*

1 File transfer over a C socket

Save the given client-server code `client.c` and `server.c`, preferably, in separate “client” and “server” folders. Compile and test the client-server code. For compiling, you can invoke:

```
gcc srcfilename -o execfilename
```

1. Integrate your code for file transfer which you wrote in the previous lab to `client.c` and `server.c` so that once connected, the server sends a specified file to the client (“sample.txt” for example).
2. Implement command-line switch “f” such that user can provide filename to serve from terminal. Test the code on a large file. Compare the sent and received files.
3. Do the previous step using a UDP socket. Are the two files the same? Why or why not?

Submission Prepare a file that contains your name, AU ID and email address giving it a name that contains your ID. Your server must be able to send this file to a specified IP address.