

# CS 105

## Socket Experience

### Quiz Version

November 29, 2010

18h 43min

## Introduction

The purpose of this assignment is to code a socket example and to code an I/O example. The lab can (almost) be accomplished by documenting the code found in the text.

## Logistics

You **MUST** work in a group of at least two people in solving the problems for this assignment. The only “hand-in” will be electronic. Any clarifications and revisions to the assignment will be posted on the course Web page. **We strongly recommend that you and your partner brainstorm before coding.**

## Handout Instructions

Basically, you are to implement **echo** using sockets and using I/O.

## Socket Instructions

You are to following the book example with the following additons/clarifications:

- Do not download any code from the CMU website or anywhere else, i.e., enter the code yourselves.
- Use one partner’s UNIX id as the port number for your server.
- Run your server on `Wilkes` and your client on `Knuth`.

- **Do not** use any of the encapsulated functions provided in the text, e.g., `open_clientfd`
- Use calls to DNS via your **dnsaccess** program to get the server IP address
- Catch any and all errors that might be generated by any of your library calls
- Have **both** the server and the client use print statements to indicate what is happening. See the text for examples.
- Document your code very well.

### What to Turn-in

- Source code, **echoserver.c** for the server. Make sure to include team member names in the comments.
- Source code, **echoclient.c** for the client. Make sure to include team member names in the comments.
- `script` session for both the client and the server of at least one interaction. Submit these as a single text file, **exchange.txt**.

### Submission

Use <http://www.cs.hmc.edu/~submissions/submissions/home.py> to submit the two commented C programs and the textfile.