

Lab #5: Client/Server & Networking

Terminal Access:

(PC) Download Putty & connect to k200.ecs.csun.edu (or ssh.csun.edu)

(MAC) use Terminal \$ ssh [moodle id]@k200.ecs.csun.edu

Due Date:

November 28, 2016 2355 hours

For this assignment will need to write 2 separate programs, a client process and a server process. The client process makes a connection to the server, and transmits 2 numbers to the server. The server listens for client communication and when it has received 2 numbers, it adds them together, displays the total on-screen, and quits.

Program requirements:

1. The client needs to know the server IP address and port number. You need to know how to determine these from the server-side.
2. Fix the sample code so it runs on the K200. 'man' and 'man -k' should help
3. Make the connection, send each number AS AN INTEGER separately, and close the socket when finished. Conversion must be done on the client, not the server
4. On the server-side wait until 2 separate connections are made, add the numbers together, display the total, and then shutdown the server
5. 5% Extra Credit: instead of Moodle, submit your assignment via <https://education.github.com/> (MUST be private, invite swirsz) I'll send an email after the due date to all individuals who I have shared Github access informing them that I will grade their program from Github. If you do not receive a notice within 24 hours after the due date, email me a link to your Github repository. I will use Github's last modified date as the submission date.

You must submit two things: program files and the output from running the program.

```
$ ./client
Enter a number: 99
$ ./client
Enter a number: 45
```

```
$ ./server
Received number 1: 99
Received number 2: 45
Here are the numbers added together: 144
```