**CS 3013 Network Programming**

**Fall, 2022**

# **Assignment #1**

# **Network Programming Source Code Installation**

# **Aug. 17, 2022**

1. **Download and Install Source Code**
2. Download Source code
3. Open a web browser
4. Type [www.unpbook.com](http://www.unpbook.com)
5. Click Source code
6. Save the source code (file name is unpv13e.tar.gz)
7. Transfer the Source code file to Ada
8. Open a FTP program (WINscp/Filezella)
9. Fill the blanks (login, password )
10. Connect to Ada
11. Once connected, make a directory cs3013\_fall\_2022

>>right click and select new directory, and then type cs3013\_fall\_2022

1. Move the source code file unpv13e.tar.gz into the directory.
2. Unpack the source file
3. Login in Ada via Putty
4. Change to directory cs3013\_fall\_2022

Type: cd cs3013\_fall\_2022

1. Unpack your source code:

typing:

tar xvfz unpv13e.tar.gz

1. Change directory to unpv13e
2. Type ls command to see the files under unpv13e
3. Read directory contents carefully
4. Install library
5. Type: ./configure

to complete system configuration process

1. Change directory to lib
2. Type: make

To compile your library source code and you will see the compiling process

1. Back to source code home directory by typing cd ..
2. Change directory to libfree
3. Type: make

to compile the code files under this directory

1. Back to source code home directory by typing cd ..
2. Change directory to libgai
3. Type make

to compile the code files under this directory (some error message may show up and just ignore it because it will have no impact on your source code)

1. Install client/server source code
2. Change to intro directory
3. Type: make

to compile all client and server source files

1. Type: ls

to see if we have some executables they are in green color

1. Run your client/server programs
2. Run server program first (type ./daytimetcpsrv &)
3. You will see an error message, such as the port is in use)
4. Server’s port number must be changed.
5. Type pico daytimetcpsrv.c to open server file
6. Find the port number 13 and change it to a number that is bibber than 1023, such as 5000
7. Type make again to recompile the server code
8. Type ./daytimetcpsrv & to run the server again
9. Type **ps** to verify that the server is running
10. Once the server is running, and then run client program by typing ./daytimetcpcli 127.0.0.1 and hit enter key
11. An error message may show up, and pico daytimetcpcli.c and change the port number to the number you just changed to, such as 5000.
12. Run daytimetcpcli again

./daytimetcpcli 127.0.0.1

1. You will see today’s information on your screen if the client connected to the server successfully.
2. **Questions need to be answered**
3. Did you complete this lab successfully? If not, please explain why.

A: No, there is an issue between MacOS and Putty/Ada along with FileZilla not compiling it correctly. I had to switch to my windows Laptop to get it to work.

1. What did you learn most through this lab?

A: The differences between a Unix-based OS such as MacOS and running regular Linux on my windows-based PC.

1. Why do we need to modify the source code file to make client/server program work?

A: You need to modify the source code to make sure that it can run on your environment you are using.

1. **Due:**

Turn in your answers to the blackboard on Aug. 22, Monday, 2022, 11:59 pm