## **ECE 331**

## **Homework 11**

See course web site for due date

<u>Place your typed homework answers in vim</u>. Print single sided with your name using a **mono space font**. No need to restate questions. Fully investigating questions is required for a higher grade. Please use the kernel coding style for all code. Please use your RPi for developing answers. Although code should be written and run on a RPi, it should run on ANY POSIX compliant OS. As always, all code shall be comment, conform to the Linux Kernel Coding Style, and error conditions shall be checked and appropriately handled.

1. Write a program in C that fetches a web page. Find a TCP client program tutorial to help you write the program. Use the following HTTP request string:

"GET /index.html HTTP/1.1\r\nhost: thetraveler\r\n\r\n"

Have the program accept the hostname and port on the command line.

- a) State the URL of the tutorial
- b) Include the source code of your program

Although you may use other's code, be sure you understand how the program works - that is the proces of connecting to a TCP server. You should be able to explain the operation and purpose of every function call and its arguments.

2. Write a script in python that fetches a web page. wc output for my script 5 9 91 htmlget. For your answer, include the script source.

3. Calculate and give the missing addresses and netmasks. Show your work.

Network (DDN)	IP (DDN)	Netmask (CIDR)	Broadcast (DDN)
	10.129.4.5	/13	
172.81.32.0			172.81.47.255