**Networking Assignment 2**

1. What does DHCP stand for, and what is the purpose of a DCHP server?
2. What does DNS stand for, and what is the purpose of a DNS server?
3. What is your machine’s IP (v4) address currently? What is the IP address of the DNS server your machine is using? Why does your machine need to know the IP address of an DNS server? *Hint: use the “ipconfig /all” command.*
4. What is the IP address of the machines “www.shu.edu”, “sciris.shu.edu”, “smtp.shu.edu”, and “ldap.shu.edu"? What do these addresses have in common? *Hint: use the “ping” command.*
5. If you “ping” the machine “www.google.com” you get some statistics; what do you think these stats mean?
6. What is the IP address of your favorite web site? Suppose you memorized that address and next time you use a web browser you enter “http://memorized.ip.number/” instead of “http://www.server.name”. Would that be advantageous?
7. All machines on the Internet have a unique IP address, but many also have names that are easier to remember. For example, the IP address 173.194.33.104 is also known as [www.google.com](http://www.google.com) (called the IP *name* belonging to an IP number). Is there any pattern to IP names? Who can make up IP names?
8. Use the web site [www.whois.net](http://www.whois.net) to get information about the domain “shu.edu” as well as “www.mathcs.org”.
9. What is “cyber squatting”? What is your opinion about cyber squatting?
10. You may have heard the term “net neutrality” in the news lately. What does it refer to? What do you think about it?