1. Use telnet to connect to the college of engineering web server (www.uiowa.edu), then issue a GET command to request the base page index.html. (Note: telnet will not work with the University wireless network due to firewall issues. It will work with on-campus wired Ethernet and should also work with most off-campus wired or wireless networks.) Based upon this exchange with the web server, answer the following questions:

   a. What web server software and version does the site use?

   b. When was the index.html page last updated?

   c. Does the web-server use persistent or non-persistent connections, by default? (Note: you may need to consult the HTTP RFC or other available on-line documentation?) Explain how you determined your answer?

2. This problem investigates the use of cookies for HTTP session management and other purposes. Open the Mozilla Firefox web browser on a Windows computer. (The instructions here assume the current Firefox desktop version. If you are using an older version of Firefox or another type of device, the process may be slightly different.)
   From the menu bar at the bottom of the start page, select "Options" and then select "privacy" from the menu at the left side of the Options page. Click on the "remove individual cookies" link. This should display a window showing all cookies currently cached by the browser.
   Click on the "Remove All" button to clear the browser's cookie cache.
   Now use the browser to access the page www.amazon.com.
   Now, again using the "remove individual cookies" option, observe the new cookies that have been added to the browser's cookie cache.

   a. List the name and expiration date for each amazon.com cookie added to the browser cache as a result of accessing the amazon.com home page and indicate for each if it is a session cookie or a persistent cookie. (You do not need to list cookies for domains other than amazon.com—e.g. adnx.com).

   b. What is the expiration interval for the amazon.com session?

   Now select an item on the amazon.com page and add it to your shopping cart. (Don't worry. You won't have to purchase the item to complete the assignment.)
   View the shopping cart to confirm that the selected item is in the cart. Exit the shopping cart view