Please answer the questions below as fully and completely as you can. Turn in your written answers in class during the next class meeting. As part of this exercise set, you must read the following.

- Ch. 4.1, 4.2, and 4.5, A Gift of Fire: Intellectual Property

1. **Before doing the reading**, briefly describe your own personal opinion regarding what your rights *should* be when you purchase a software product. Consider your rights in regard to using the software, copying the software for use by yourself, copying the software for use by others, renting the software out for others to use, modifying the software for your own personal use, and reselling modified software.

2. As described in the reading, digital rights management can conflict with fair use policies. Assume, as a software expert, you have been asked to recommend restrictions on the use of digital rights management in software products. What would you consider disallowing when it comes to digital rights management? For each restriction, explain why you would recommend this restriction and how it relates to fair use. Define as many restrictions as you can.
3. Look over the GNU General Public License (GPL v3, https://www.gnu.org/copyleft/gpl.html) and the Apache 2.0 license (http://apache.org/licenses/LICENSE-2.0). Briefly describe *in your own words* the purpose of these licenses and what rights they maintain for software creators.

4. There is one major difference between the GPL and Apache licenses in terms of restrictions they place on the use of source code placed under the license. Identify and explain the difference.
5. Find and read a license agreement for a commercial software product of your choice. State the product you selected and answer the following questions concerning the license. What does the license say about the number of copies you can make? Does the license specify penalties for making unauthorized copies (and if so, what are the penalties)? Do you consider the license agreement to be clearly stated? Do you consider the license agreement to be reasonable? Does the license respect your fair use rights?

6. Find two software patents (www.google.com/patents) and give a brief summary of the inventions and the general claims of each. Some famous examples of software patents: Amazon One-click (US 5960411), Browser Plug-ins (US 5838906), Yahoo! Search marketing (US 6269361), Progress bars (US 5301348), RSA (US 4405829).
7. Use Google’s patent search to find two patents related to your senior design project. Briefly summarize the idea of each invention and their corresponding claims.

8. According to many experts and also emphasized in the reading, there are a number of issues in applying patent law to software. Of major concern is whether software patents ultimately help or hurt software innovation, and then secondarily, whether they are ultimately fair. Assume you have been asked to develop a set of rules for software patents (e.g., what constitutes a patent, how long patents last, and how patents are applied, etc.) to help increase innovation and create a more fair system. What rules would you institute and why?