***Due:  Sunday, May 10th, 11:59 PM***

*Late submissions not accepted.*

This is the final MajorPP (#4) of the semester.

**Expert System**

For this assignment, you will use what you learned from chapters 7, 8, and 9 to build an expert system. To construct the expert system, you will create a knowledge base using Prolog.

Your expert system requires a knowledge base in the range of 30 to 40 some odd rules and facts.

Some ideas:

* Diagnosing medical conditions
* Diagnosing computer problems
* Your family genealogy
* Playing a game
* Diagnosing what types of car maintenance needs to be done
* A system to help you navigate public transit.

Identify some expert you can refer to (example, WebMD).

Provide evidence your system works.  A listing of test cases trying to solve different problems would be sufficient.

Upon submission, provide a listing of your rules and a summary documenting your system.  Include the source code for your system. The extra documentation required could be provided as comments in your source code or in a separate word document.

Your submission should demonstrate your understanding of expert systems, but I don't expect you to take a month on it (the semester is almost over).

**Hints:**

* I've provided several resources to help you out with this assignment (see above).
* I suspect Prolog Step-by-Step tutorial and the TutorialsPoint Expert Systems tutorial will be all you need to get this assignment done (along with the logic learned in CH07, CH08, CH09) and each are really short.
* You can be your own expert, maybe even make up your own game or rules for a game.
* Check out the video I did and the sample expert system I posted.
* Hopefully, this will be a really easy assignment.  Don't be surprised if it is!

**Submission Instructions:**

* Submit your program in a single, plain-text source file.
* Do not attach any screenshots.
* Do not archive your submission (no ZIP, TAR, etc).
* Include a brief summary of how your program is built (as above).
* If you do not follow these submission instructions, you will lose points.