

LOGIC

Project #1

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Startup

1. Install (if necessary) and run SWI-Prolog.
2. It is available for download for Windows, Macintosh and Linux from <http://www.swi-prolog.org>.
3. Start the text editor. Get comfortable moving around in the editor, editing clauses, and compiling them. Help is available by selecting "Help."

Representing Knowledge in Prolog

Encode the following sentences as Prolog clauses.

- All cows eat grass.
- Rainy days are always cloudy.
- It was cloudy on Tuesday.
- If food is salty or spicy, then it is delicious.
- If something walks like a duck and talks like a duck, then it is a duck.
- All cats are mammals.
- Some mammal is a cat. (think about this one ...)
- Lisp and Prolog are programming languages.
- NBA players are tall men
- Something is a bat if it is a mammal that can fly.

Add other interesting clauses from a domain that interests you:
e.g., biology, chemistry or economics.

Inference

Load in the file. Use this to perform interesting queries of your choice (Be creative; see how far you can push the system; profile how the system slows down with length of the clauses, etc.). Include a trace of your interaction with Prolog.