CECS 424-01 Spring 2018

Assignment 5

Homework 5

1. Download and install an IDE for Prolog, e.g. SWI-Prolog.
2. Read the first two sections of chapter 12 "Logic Programming".

Lab Assignment 5: Logic Puzzle

Write a Prolog program to solve the logic puzzle "Star Tricked". You will need a way of writing facts that occurred earlier in the week. You can use simple clauses like **earlier(tuesday, wednesday)**. Or you can encode days as numbers and use arithmetic, then translate the output.

STAR TRICKED   BY KEITH KING   ★

Last week, four UFO enthusiasts made sightings of unidentified flying objects in their neighborhood. Each of the four reported his or her sighting on a different day, and soon the neighborhood was abuzz with rumors of little green men. By the weekend, though, the government stepped in and was able to give each person a different, plausible explanation of what he or she had "really" seen. Can you determine the day (Tuesday through Friday) each person sighted a UFO, as well as the object that it turned out to be?

Solution is on page 54.

1. Mr. Klatu made his sighting at some point earlier in the week than the one who saw the balloon, but at some point later in the week than the one who spotted the Frisbee (who isn't Ms. Gort).

2. Friday's sighting was made by either Ms. Barrada or the one who saw a clothesline (or both).

3. Mr. Nikto did not make his sighting on Tuesday.

4. Mr. Klatu isn't the one whose object turned out to be a water tower.

Deliverable: A private git repository named "**CECS 424 Spring 2018 Assignment 5**" with me (and only me, **https://bitbucket.org/Gedankenexperiment**) added as a reader, that contains all your Prolog source code as described above and a text file with the solution output of your program. ***Due date:*** *Wednesday 9 May 2018* at the beginning of lecture.