

CS 300 Lab April 9, 2015

Prolog Introduction

Student 1 _____ Student 2 _____

- Go to the following website and run all of the example queries.
<http://swish.swi-prolog.org/example/kb.pl>

Instructor _____

- Edit the facts to say that **sam** and **sue** take calculus. Also add facts that say **sam** and **don** take physics. ***DO NOT USE capital letters for the names.*** Variables in prolog start with a capital letter!
- Query the system and ask
 - does don take physics?
 - does sue take physics?
 - does sam take calculus?

Instructor _____

- Add a fact that says don has Wahjudi for a class.
- Write a fact that says X has a rough semester if he/she takes calculus and physics (use the jealousy fact as a guide)
 - For each of don, sam, and sue, ask if they have rough semesters.

Instructor _____

- Write a fact that says that X has a rough semester if he/she takes physics and calculus OR has Wahjudi for a class.
 - Query the system to determine which of don, sam, or sue has a rough semester.

Instructor _____

- Write a query that determines who has a rough semester.

Instructor _____

- Write a fact that says X has a rough semester if (X takes calculus and physics) OR X has wahjudi for class.

Instructor _____

- Translate the following facts to English

man(adam).
man(peter).
man(paul).
woman(marry).
woman(eve).

- Read and understand the following facts:
parent(adam,peter). % means adam is parent of peter
parent(eve,peter).
parent(adam,paul).
parent(marry,paul).

- Using the parent facts listed above, write the following facts in English
father(F,C):-man(F),parent(F,C).
mother(M,C):-woman(M),parent(M,C).

is_father(F):-father(F,_).
is_mother(M):-mother(M,_).

son(S,P):-man(S),parent(P,S).
daughter(D,P):-woman(D),parent(P,D).

Instructor _____