Prolog Tutorials

Lab-1

Basic Prolog Commands

A few essential commands:

halt.

> exit Prolog (short form: control-d)

consult(filename).

> load the file named filename.pl (note the added .pl extension). If you need some more complex name (for example with a path), put it in single quotes, for example consult('/Users/philip/squid.pl').

[filename].

> shorthand for consult

ls. - see the directories.

cd. - change directories.

Example 1:

The sky is blue.
The tree is green.
Computer is a machine.
Winter is cold.
Eye is black.

Prolog programs consist of a number of clauses. A clause is always terminated by a full stop. There are two types of clause: facts and rules.

Prolog program:

```
sky(blue).
Tree(green).
computer(machine).
Winter(cold).
Eye(black).
```

Save the file pro1.pl extension.

?- consult('ex1.pl').
OR
?- ['Desktop/ex1.pl'].

?- sky(blue).
?- sky(X).

X is a variable in prolog.

Example 2:

```
dog(fido).
cat(felix).
animal(X):-
      dog(X).
```

animal(X):- dog(X). is the rules.

Example 3:

```
/* Animals Program 1 */
dog(fido).
cat(mary).
dog(rover).
dog(tom).
cat(harry).
dog(henry).
cat(bill).
cat(steve).

animal(X):-
      dog(X).
```

?-dog(fido).

yes

?-dog(daisy).

No

?- dog(X).

pauses – user presses ;

?- cat(Y).

pauses – user presses ;

?- listing(dog).

?- listing(cat).

Example 4:

```
result(richard,3.5).

result(florence,3.6).

result(sabbir,3.8).

result(nabil,3.7).

get_result:-

      write("Enter Name"),nl,

      read(X),nl,

      result(X,Y),nl,

      write(Y).
```

?- get_result.