# **Introduction to Prolog**

## Making a .pl file and consulting.

Make a simple text file and rename it to test.pl.

Write in file

boy(ram).

Through the Prolog Terminal, use the command as below:

?- consult (“Absolute path of the file”).

?- consult('/home/mohan/test.pl').

true.

Then,

?- boy(ram).

true.

The file can be directly consulted form File>Consult>Select File.

First File

Filename: first.pl

boy(ram).

girl(sita).

Terminal

1 ?- consult('/home/bips/Desktop/prolog/test.pl').

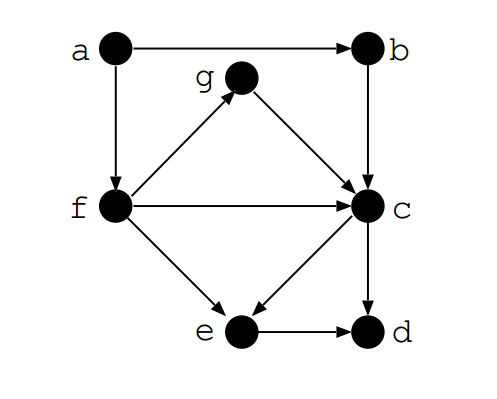
2 ?- boy(ram).

true.

3 ?- boy(sita).

False.

# Graph Representation



**File name: graph.pl**

edge(a,b).

edge(a,f).

edge(f,e).

edge(e,d).

edge(b,c).

edge(f,c).

edge(c,e).

edge(f,g).

edge(g,c).

edge(c,d).

*/\*If two vertices Node1 and Node2 are connected, there is path between them.\*/*

*path (Node1, Node2):- edge(Node1,Node2).*

*/\* This is the recursion that checks whether there is path between two nodes which are connected through many edges \*/*

path(Node1, Node2) :- edge(Node1,Somenode),path(Somenode,Node2).

Terminal

1 ?- edge(a,b).

true .

2 ?- edge(X,c).

X = b ;

X = f ;

X = g.

3 ?- path(a,f).

true .

4 ?- path(a,d).

true ;

# Family Representation

## File name: family.pl

male(amar).

male(chandra).

female(bina).

female(divya).

parent(amar,chandra).

parent(amar,divya).

parent(bina,chandra).

parent(bina,divya).

father (X, Y): -parent (X, Y), male(X).

mother (X, Y): -parent (X, Y), female(X).

/\* X is sibling of Y if parents are same and X and Y are different \*/

sibling (X, Y): - parent (Z, X), parent (Z, Y), different (X, Y).

/\* X is not different to X \*/

different (X, X): -!, fail.

/\* X is different than Y \*/

different (X, Y).

Terminal

? - consult('family.pl').  
true.

? - mother (bina, divya).  
true.

? - father (amar, divya).  
true.

? - father (amar, chandra).  
true.

? - sibling (chandra, chandra).  
false.

? - sibling (chandra, divya).  
true.

? - parent (X, chandra).

X = amar ;  
X = bina;

?- sibling(amar, chandra).  
false.