\*Rules − Rules are extinctions of facts that contain conditional clauses.

To satisfy a rule these conditions should be met.

Define following facts as the relation of "Parent"

---------------------------------------------

1) Tom is a parent of Bob

2) Pam is a parent of Bob

3) Tom is a parent of Liz

4) Bob is a parent of Ann

5) Bob is a parent of Pat

6) Pat is a parent of Jim

Define following facts as the relation of male and female

-----------------------------------------------------------

Female->Pam, Liz, Pat, Ann

Male->Tom, Bob, Jim

Define corresponding rules

-----------------------------

/\*symbol (:- ) will be pronounced as “If”, or “is implied by”.

Known as neck symbol, the LHS of this symbol is called the Head, and right-hand side is called Body.

\*/

7) Define the relation mother using parent and female.

8) Define the relation father using parent and male.

Siblings

--------------

sibling(X,Y): X and Y have the same parent and X != Y.

CONJOINED GOAL ("AND") => use comma (,)

DISJOINT GOALS ("OR") => semicolon; |

NEGATIVE GOALS (NOT) => \+

9) Define the relation sister using parent and female.

10) Define the relation brother using parent and male.

11) Define the relation grandparent using parent.

12) Define the relation grandfather using parent and male.

13) Define the relation grandmother using parent and female.

14) Define the relation grandchild using parent.

15) Define the relation grandson using parent and male.

16) Define the relation granddaughter using parent and female.

17) Everybody who has a child is happy.

18) For all X , if X has a child who has a sister then X has 2 children

19) Define the relation aunt(X,Y) in terms of the relations parent and sister.

20) Define the relation uncle using the appropriate relations.