

EXPERIMENT:23 Write the prolog program to implement family tree.

PROGRAM:

% Facts: parent(Parent, Child).

parent(john, mary).

parent(john, peter).

parent(susan, mary).

parent(susan, peter).

parent(peter, linda).

parent(linda, sam).

% Facts: gender

male(john).

male(peter).

male(sam).

female(susan).

female(mary).

female(linda).

% Rules:

father(F, C) :-

parent(F, C),

male(F).

mother(M, C) :-

parent(M, C),
female(M).

grandparent(GP, GC) :-
parent(GP, P),
parent(P, GC).

grandfather(GF, GC) :-
grandparent(GF, GC),
male(GF).

grandmother(GM, GC) :-
grandparent(GM, GC),
female(GM).


sibling(X, Y) :-
parent(P, X),
parent(P, Y),
 $X \neq Y$.

brother(B, S) :-
sibling(B, S),
male(B).

sister(Sis, S) :-
sibling(Sis, S),

female(Sis).

OUTPUT:

 `sibling(peter, Sibling).`

Sibling = mary

Next

10

100

1,000

Stop

?- `sibling(peter, Sibling).`