OUTPUT

male(peter) → true
father(chris, peter) → true
father(chris, betty) → false
grandfather(kevin, peter) → true
grandfather(jeny, peter) → false
grandmother(jeny, peter) → false
mother(chris, X) → X = betty
brother(helen, chris) → true
brother(chris, helen) → false

father(X, Y)
X = chris Y = peter
X = helen Y = peter
X = jerry Y = john
X = kevin Y = chris

mother(X, Y)
X = chris Y = betty
X = helen Y = betty
X = kevin Y = bisa
X = jerry Y = helen

grandmother(X, Y)
X = kevin Y = betty
X = jeny Y = betty

grandfather(X, Y)
X = kevin Y = peter
X = jeny Y = peter

brother(X, Y)
X = Y, Y = chris
X = helen, Y = chris
X = Y, Y = kelvin

sister(X, Y)
X = Y, Y = jenny
X = chris Y = jenny
X = Y, Y = helen.

EXP NO: 12

AIM: PROLOG FAMILY TREE

KNOWLEDGE BASE:

FACTS

male(peter)
male(john)
male(chris)
male(Kevin)

female(betty)
female(jeny)
female(lisa)
female(helen)

parentof(chris, peter)
parentof(chris, betty)
parentof(helen, peter)
parentof(helen, betty)
parentof(Kevin, chris)
parentof(Kevin, lisa)
parentof(jeny, john)
parentof(jeny, Helen)

mother(x,y):- female(y),
parentof(x,y).

grandfather:- male(y)
parentof(x,z)
parentof(z,y)

grandmother(x,y):- female(y)
parentof(x,z),
parentof(z,y)

brother(x,y):- male(y),
father(x,z)
father(y,w),
z==w

sister(x,y):- female(y)
father(x,z)
father(y,w)
z==w

RULES:

son, ~~grandparent~~
son, parent
father(x,y):- male(y),
parentof(x,y).