**Ques 1. Write a prolog program to implement the family tree and demonstrate the family relationship.**

**Code**

% Facts male(raj). male(amit). male(rahul). male(arjun).

female(meera).

female(kavita). female(sonali). female(neha).

% Relationships parent(raj, amit). parent(raj, sonali). parent(meera, amit). parent(meera, sonali). parent(amit, rahul). parent(kavita, rahul). parent(amit, neha). parent(kavita, neha). parent(sonali, arjun). wife(meera, raj). wife(kavita, amit).

% Rules

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

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

grandfather(X, Y) :- male(X), parent(X, Z), parent(Z, Y).

grandmother(X, Y) :- female(X), parent(X, Z), parent(Z, Y).

sibling(X, Y) :- parent(Z, X), parent(Z, Y), X \= Y.

uncle(X, Y) :- male(X), sibling(X, Z), parent(Z, Y).

aunt(X, Y) :- female(X), sibling(X, Z), parent(Z, Y).

cousin(X, Y) :- parent(A, X), parent(B, Y), sibling(A, B).

