Name : Rushikesh Nalin Chandak

Roll no: 5

male(parshu).

male(ramesh).

male(khivraj).

male(ram).

male(nitin).

male(nilesh).

male(nalin).

male(sonu).

male(kanha).

male(madhur).

male(manan).

male(rushi).

male(raghav).

male(manoj).

male(anand).

male(gaurish).

male(manas).

male(naman).

male(arnav).

male(jagdish).

male(pradip).

male(ritesh).

male(rahul).

male(shlok).

male(sarthak).

female(sarita).

female(shanta).

female(maina).

female(mera).

female(pankaja).

female(priti).

female(pranjal).

female(prearna).

female(radhika).

female(sunita).

female(sangita).

female(achal).

female(shreya).

female(ruchi)

parent(parshu, ramesh).

parent(parshu, khivraj).

parent(parshu, ram).

parent(sarita, ramesh).

parent(sarita, ram).

parent(sarita, khivraj).

parent(ramesh, nitin).

parent(ramesh, nilesh).

parent(ramesh, nalin).

parent(shanta, pankaj).

parent(shanta, preeti).

parent(shanta, nilesh).

parent(nitin, sonu).

parent(nitin, kanha).

parent(pankaja, sonu).

parent(pankaja, kanha).

parent(nilesh, madhur).

parent(nilesh, manan).

parent(priti, madhur).

parent(priti, manan).

parent(nalin, rushi).

parent(nalin, raghav).

parent(pranjal, rushi).

parent(pranjal, raghav).

parent(khivraj, manoj).

parent(khivraj, anand).

parent(khivraj,rahul).

parent(maina, manoj).

parent(maina, anand).

parent(manoj, gaurish).

parent(manoj, manas).

parent(prearna, gaurish).

parent(prearna, manas).

parent(anand, naman).

parent(anand, arnav).

parent(radhika, raj).

parent(radhika, ayush).

parent(ram, jagdish).

parent(ram,pradip).

parent(ram, jagdish).

parent(mera, jagdish).

parent(mera, pradip).

parent(jagdish, ritesh).

parent(jagdish,shreya).

parent(sunita,ritesh).

parent(sunita,shreya).

parent(pradip,chinmay).

parent(sangita,chinmay).

parent(rahul,shlok).

parent(ruchi,shlok).

% Marriage relationships

married(parshu, sarita).

married(ramesh,shanta).

married(khivraj, maina).

married(ram, mera).

married(nitin,pankaja).

married(nilesh,priti).

married(nalin,pranjal).

married(manoj,prearna).

married(anand,radhika).

married(jagdish,sunita).

married(pradip,sangita).

married(ritesh,achal).

married(sarthak,shreya).

married(rahul,ruchi).

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

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

husband(X,Y):- male(X),female(Y),married(X,Y).

wife(X,Y):- female(X),male(Y),married(Y,X).

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

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

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

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

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

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

cousin(X,Y):- parent(P,X),parent(Q,Y),parent(Z,P),parent(Z,Q),P\=Q,X\=Y.

daughter\_in\_law(X, Y) :- female(X),married(Z,X),parent(Y, Z).

son\_in\_law(X,Y):- male(X),married(X,Z),parent(Y,Z).

maternaluncle\_mama(X,Y):- parent(Z,Y),parent(P,Z),parent(P,X),male(X),female(Z).

maternalaunt(X,Y):- married(Z,X),maternaluncle(Z,Y).

uncle(X,Y):- parent(Z,Y),parent(P,Z),parent(P,X),Z\=X,male(X).

aunt(X,Y):- female(X),parent(Z,Y),married(P,X),parent(Q,Z),parent(Q,P),Z\=P,male(Z).

second\_uncle(X,Y):- male(X),father(D,Y),father(Z,D),father(S,X),brother(S,Z),Z\=S.

second\_aunt(X,Y):- female(X),father(D,Y),father(Z,D),husband(R,X),father(T,R),brother(T,Z).

second\_maternal\_uncle(X,Y):- male(X),mother(D,Y),father(Z,D),father(S,X),brother(S,Z),Z\=S.

second\_maternal\_aunt(X,Y):- female(X),mother(D,Y),father(Z,D),husband(R,X),father(T,R),brother(T,Z).

aunt\_masi(X,Y):-sister(X,Z),mother(Z,Y).

second\_cousin(X, Y) :- grandfather(W, Y), brother(W, Z), grandfather(Z, X).

great\_grandfather(X, Z) :- father(X, Y), grandfather(Y, Z).

great\_grandmother(X, Z) :- mother(X, Y), grandfather(Y, Z).

grandson(X, Y) :- male(X), grandmother(Y, X).

grandson\_2(X, Y) :- male(X), grandfather(Y, X).

granddaughter(X,Y):-female(X), grandmother(Y,X).

granddaughter\_2(X,Y):-female(X), grandfather(Y,X).

second\_grandmother(X, Y) :- second\_uncle(W, Y), mother(X, W).

second\_grandfather(X, Y) :- second\_uncle(W, Y), father(X, W).

sister\_in\_law(X,Y):-married(Z,Y),brother(Z,X).

second\_sister\_in\_law(X,Y):- married(Z,Y),cousin(Z,X).

brother\_in\_law(X,Y):-married(X,Z),brother(Y,Z).

brother\_in\_law\_2(X,Y):- married(X,Z),married(Y,W),sister(Z,W).

sisterinlaw\_bhabhi1(X,Y):-husband(Z,X),parent(W,Z),parent(W,Y).