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# Write a program to implement Family Tree

## Code

% Fathers Side

male(varun).

male(karan).

male(yogesh).

male(mahendra).

male(prashant).

male(sanjay).

male(yash).

male(arvind).

female(amita).

female(jyoti).

female(deepal).

female(taruni).

female(archana).

female(arpita).

female(hemlata).

parent\_of(mahendra,varun).

parent\_of(amita,varun).

parent\_of(jyoti,karan).

parent\_of(jyoti,deepal).

parent\_of(yogesh,karan).

parent\_of(yogesh,deepal).

parent\_of(prashant,yash).

parent\_of(prashant,arpita).

parent\_of(taruni,yash).

parent\_of(taruni,arpita).

parent\_of(arvind,mahendra).

parent\_of(arvind,yogesh).

parent\_of(arvind,prashant).

parent\_of(arvind,sanjay).

parent\_of(hemlata,yogesh).

parent\_of(hemlata,mahendra).

married(yogesh,jyoti).

married(mahendra,amita).

married(prashant,taruni).

married(sanjay,archana).

married(arvind,hemlata).

%self roles rule

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

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

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

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

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

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

uncle\_of(X,Y) :- parent\_of(Z,Y), brother(Z,X).

grandparent(X, Y) :- parent\_of(X, Z), parent\_of(Z, Y).

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

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

aunt\_of(X,Y) :- female(X), father(Z,Y), brother(Z,W), married(W,X).

## Output

Graphical user interface, text, email

Description automatically generated