

Prolog code

```
male(ram).
male(laxman).
male(bharat).
male(shatrughan).
male(dasratha).

female(kausalya).
female(sumitra).
female(kaikeyi).
female(sita).

son(ram,dasratha).
son(laxman,dasratha).
son(bharat,dasratha).
son(shatrughan,dasratha).

son(ram,kausalya).
son(laxman,sumitra).
son(bharat,kaikeyi).
son(shatrughan,sumitra).

wife(kausalya,dasratha).
wife(sumitra,dasratha).
wife(kaikeyi,dasratha).
wife(sita,ram).

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

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


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

fatherInLaw(X,Y):-
    male(X),wife(Y,Z),father(X,Z).

motherInLaw(X,Y):-
    female(X),wife(Y,Z),mother(X,Z).
```

Query:

1. dasrath is father of ram, lakshman, bharat, shatrughan.

 `father(dasratha,ram),father(dasratha,laxman),father(dasratha,bharat),father(dasratha,shatrughan).`


true

Next 10 100 1,000 Stop

1

?- father(dasratha,ram),father(dasratha,laxman),father(dasratha,bharat),father(dasratha,shatrughan).

2. dasrath is father in law of sita

 `fatherInLaw(dasratha,sita).`

true

Next 10 100 1,000 Stop

1

?- fatherInLaw(dasratha,sita).

3. find mother of ram, lakshman, bharat and shatrughan

 `mother(X,ram).`

X = kausalya

 `mother(X,laxman).`

X = sumitra

 `mother(X,bharat).`

X = kaikeyi

 `mother(X,shatrughan).`

X = sumitra

4. Kaushalya is mother in law of sita

 `motherInLaw(kausalya,sita).`

true

1

?- motherInLaw(kausalya,sita).