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Roll No.51

Practical No.8

Prolog file

Output:

```
father_in_law(dasharat, sita).
?- mother_in_law(kaushalya,sita).
true.
?- mother(X,Y).
X = kaushalya,
Y = ram ;
false.
 ?- parent(X,Y).
?- parent(X,Y).
X = kaushalya,
Y = ram;
X = dasharat,
Y = ram;
X = dasharat,
Y = lakshman;
X = dasharat,
Y = bharat;
X = dasharat,
Y = shatrughna.
?- father(X,Y).
X = dasharat,
Y = ram .
?- mother_in_law(dasharat,sita).
false.
?- mother_in_law(kaushalya,sita).
true.
?-
% c:/Users/DT USER/Desktop/A_51_prolog/ramayan.pl compiled 0.00 sec, 1 clauses
?-
| brother_in_law(X,Y).
X = Y, Y = ram ,
c:/Users/DT USER/Desktop/A_51_prolog/ramayan.pl compiled 0.00 sec, 0 clauses c:/Users/DT USER/Desktop/A_51_prolog/ramayan.pl compiled 0.00 sec, 0 clauses
       brother_in_law(lakshman,sita).
true.
?-
```

Code:

```
ramayan.pl [modified]
```

```
parent (kaushalya, ram) .
parent (dasharat, ram) .
parent (dasharat, lakshman).
parent (dasharat, bharat).
parent(dasharat, shatrughna).
male (dasharat).
male (ram) .
male(lakshman).
male (bharat) .
male (shatrughna) .
female (sita).
female (kaushalya).
wife(sita, ram).
wife (kaushalya, dasharat) .
father_in_law(X, Y) :- father(X, Z), wife(Y, Z).
mother_in_law(X, Y) :- mother(X, Z), wife(Y, Z).
father(X,Y):- parent(X,Y),male(X).
mother(X,Y):-parent(X,Y), female(X).
brother_in_law(X,Y):- wife(Y,Z),parent(K,Z),parent(K,X).
```