

Name: Sahil Hedau

Roll no.: 56

Section: A3

AI Lab Practical 8

ramayan.pl

```
male(dhasrat).  
male(ram).  
male(laxman).  
male(bharat).  
male(shatrugan).  
  
female(sita).  
female(kaushalya).  
  
parent(dhasrat, ram).  
parent(dhasrat, laxman).  
parent(dhasrat, bharat).  
parent(dhasrat, shatrugan).  
parent(kaushalya, ram).  
parent(kaushalya, laxman).  
parent(kaushalya, bharat).  
parent(kaushalya, shatrugan).  
  
wife(kaushalya, dhasrat).  
wife(sita, ram).  
husband(ram, sita).  
  
father(X, Y) :- parent(X, Y), male(X).
```


```

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

father_in_law(X, Y) :- father(X, Z), wife(Y, Z).
mother_in_law(X, Y) :- mother(X, Z), wife(Y, Z).
brother_in_law(X, Y) :- wife(Y, H), brother(X, H).

```

Outputs:

 SWI-Prolog (AMD64, Multi-threaded, version 9.3.3)

File Edit Settings Run Debug Help

Welcome to SWI-Prolog (threaded, 64 bits, version 9.3.3-21-g1fbd70c21)

SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.

Please run `?- license.` for legal details.

For online help and background, visit <https://www.swi-prolog.org>

For built-in help, use `?- help(Topic).` or `?- apropos(Word).`

`?-`

`% c:/Users/DT USER/Documents/Prolog/ramayan.pl compiled 0.00 sec, 21 clauses`

`?- father(dhasrat, ram), father(dhasrat, laxman), father(dhasrat, bharat), father(dhasrat, shatrugan).`

true .

`?- father_in_law(dhasrat, sita).`

true .

`?- mother(X, ram).`

`X = kaushalya.`

`?- mother(X, laxman).`

`X = kaushalya.`

`?- mother_in_law(kaushalya, sita).`

true .

`?-`

`% c:/Users/DT USER/Documents/Prolog/ramayan.pl compiled 0.00 sec, 1 clauses`

`?- brother(ram, laxman, dhasrat).`

true .

`?-`

?-

% c:/Users/DT USER/Documents/Prolog/ramayan.pl compiled 0.00 sec, 1 clauses

?- brother(ram, laxman, dhasrat).

true .

?-

% c:/Users/DT USER/Documents/Prolog/ramayan.pl compiled 0.00 sec, 2 clauses

?- brother_in_law(laxman,sita).

true

% c:/Users/DT USER/Documents/Prolog/ramayan.pl compiled 0.00 sec, 0 clauses

Unknown action: ␣ (h for help)

Action?

Unknown action: ␣ (h for help)

Action?

Unknown action: ␣ (h for help)

Action?

% Break level 1

[1] ?- brother_in_law(laxman,sita).

true .

[1] ?- brother(ram,laxman).

true |