



2CSDE85 - Artificial Intelligence

Practical 5

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AIM: Write a program in PROLOG for query based on family tree. Knowledge based contains the data of at-least three generations.

Code:

```
parent(roshan, sid).
parent(arti, sid).
parent(david, roshan).
parent(julia, roshan).
parent(rahul, bob).
parent(rahul, leena).
parent(rahuk, kaylie).
parent(lisa, bob).
parent(lisa, leena).
parent(lisa, kaylie).
```

```
female(arti).
female(leena).
female(lisa).
female(julia).
female(kaylie).
```

```
male(sid).
male(david).
male(rahul).
male(bob).
```

```
mother(X,Y):-parent(X,Y), female(X).
sister(X,Y):-parent(Z,X), parent(Z,Y), female(X),X\==Y.
brother(X,Y):-parent(Z,X), parent(Z,Y), male(X),X\==Y.
father(X,Y):-parent(X,Y), male(X).
```

Output:

 `parent(X,sid)`   

`X = roshan`


`X = arti`

 `mother(X,sid)`   

`X = arti`

 `sister(X,sid)`   

`false`

 `brother(X,Leena)`   

`Leena = leena,`

`X = bob`

`Leena = leena,`

`X = bob`

Next

10

100

1,000

Stop

?- `brother(X,Leena)`