AI LAB EXPERIMENT 6

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Question - Represent your family structure using facts and ask all possible query and record the output

Code:

female(tany).

female(avneet).

male(mandy).

male(shiv).

Parent(shiv, mandy).

parent(shiv , avneet).

parent(avneet,mandy).

parent(avneet,tany).

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

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

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

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brother(X,Y):-parent(Z,X),parent(Z,Y),male(X),X\==Y.
grandparent(X,Y):-parent(X,Z),parent(Z,Y).
grandmother(X,Z):-mother(X,Y),parent(Y,Z).
grandfather(X,Z):-father(X,Y),parent(Y,Z).
wife(X,Y):-parent(X,Z),parent(Y,Z),female(X),male(Y).
uncle(X,Z):-brother(X,Y),parent(Y,Z).
```

2. Describe your likes, dislikes/hates using prolog and ask all possible query and record the output

Code –

```
likes(Radha krishna garg,Football).
likes(Radha krishna garg, spidy ).
likes(Radha krishna garg, movies).
likes(Radha krishna garg, anime).

hates(Radha krishna garg, noone).
hates(Radha krishna garg, Samosa).
hates(Radha krishna garg, coa).
hates(Radha krishna garg, vitap).
```

3. Describe animal habits (Almost all animals) using prolog and ask all possible query and record the output

Code –

walks(Dog, barks).

walks(Cat, meow).

swims(Fish,InWater).

swims(Shark,InWater).

flies(Sparrow, fly).

flies(penguin, onIce).

climbs(Monkey, OnTree).

climbs(Koala, OnTree).