

**EX.NO:6**

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## **INTRODUCTION TO PROLOG**

**AIM:** To learn PROLOG terminologies and write basic programs.

**CODE:**

**KB1:**

woman(mia).

woman(jody).

woman(yolanda).

playsAirGuitar(jody).

party.

Query 1: ?-woman(mia).

Query 2: ?-playsAirGuitar(mia).

Query 3: ?-party.

Query 4: ?-concert.

Query 4: ?-concert.

**OUTPUT: -**

```
?- woman(mia).  
true.
```

```
?- playsAirGuitar(mia).  
false.
```

```
?- party.  
true.
```

```
?- concert.  
ERROR: Unknown procedure: concert/0 (DWIM could not correct goal)  
?- ■
```

## KB2:

happy(yolanda).

listens2music(mia).

Listens2music(yolanda):-happy(yolanda).

playsAirGuitar(mia):-listens2music(mia).

playsAirGuitar(Yolanda):-listens2music(yolanda).

## OUTPUT: -

```
OUTPUT: -  
?- playsAirGuitar(mia).  
true.  
  
?- playsAirGuitar(yolanda).  
true.  
  
?- ■
```

## KB3:

likes(dan,sally).

likes(sally,dan).

likes(john,brittney).

married(X,Y) :- likes(X,Y) , likes(Y,X).

friends(X,Y) :- likes(X,Y) ; likes(Y,X).

```
-----  
OUTPUT: -  
?- likes(dan,X).  
X = sally.  
  
?- married(dan,sally).  
true.  
  
?- married(john,brittney).  
false.
```

**KB4:**

food(burger).

food(sandwich).

food(pizza).

lunch(sandwich).

dinner(pizza).

meal(X):

-food(X).

**OUTPUT:**

```
?-  
|      food(pizza) .  
true.  
  
?- meal(X), lunch(X) .  
X = sandwich .  
  
?- dinner(sandwich) .  
false.  
  
?-
```

**KB5:**

owns(jack,car(bmw)).

owns(john,car(chevy)).

owns(olivia,car(civic)).

owns(jane,car(chevy)).

sedan(car(bmw)).

sedan(car(civic)).

truck(car(chevy)).

```
truck(car(chevy)).
```

**OUTPUT:**

```
?-  
|   owns(john,X).  
X = car(chevy).
```

```
?- owns(john,_).  
true.
```

```
?- owns(Who,car(chevy)).  
Who = john ,
```

```
?- owns(jane,X),sedan(X).  
false.
```

```
?- owns(jane,X),truck(X).  
X = car(chevy).
```