

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).
```