Ex: 8
Date:

Introduction to Prolog

Aim:

To learn PRolog terminologies and write basic Programs.

Source 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.

Output:

?- woman(mia)
true.

?- playsAirGuitar(mia)
false

?- party.
true

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

KB2:

```
happy(yolanda)
listensToMusic(mia).
```

```
Listens2music(Yolanda):- happy(Yolanda).
Plays Air Guitar(mia):- listens2music(mia).
Plays Air Guitar(Yolanda):- listens2music(Yolanda).
```

Output:-

```
2 - Plays Air Guitar(mia).
true.
2 - Plays Air Guitar(yolanda).
true.
2 - ■
```

KB 3:

```
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:-

```
2 - likes(dan, X)
X = Sally.

2 - married(dan, Sally).
true.

2 - married(John, brittney).
false.
```

KB4:

```
food(burger).
food(sandwich).
food(pizza).
lunch(sandwich).
dinner(Pizza).
meal(X):- food(X).
```

Output:

```
2 -
1  food(pizza).
true.

2 - meal(X). lunch(X).
X = sandwich.

2 - dinner(sandwich
False.

2-
```

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)).
```

Output:

```
2-
1  owns(john, X).
X = car(chevy).

2 - owns(john, _).
true

2 - owns(who, car(chevy)).
who = john.
2 - owns(jane, X), sedan(X).
False.
2 - owns(jane, X), truck(X).
X = car(chevy).
```

Result: Thus the Program of Prolog teminology has been Successfully executed.