

Introduction to Prolog

Ex: 13

DATE: _____

Aim:

To learn Prolog terminologies and write basic program.

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
could not correct goal)

topology

inologies and

Concert / DWIM

KB2 :

happy (yolanda) .

listens2 music (mia) .

listens2 music (yolanda) :- happy (yolanda) .

plays A18 Guitar (mia) :- listens2 music (mia) .

plays A18 Guitar (yolanda) :- listens2 music (yolanda) .

output :

? - plays A18 Guitar (mia)

true

? - Plays A18 Guitar (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(chery)).

owns(olivia, car(civic)).

owns(jane, car(chery)).

Sedan(car(bmw)).

Sedan(car(civic)).

fourwheeler(car(chery)).

output:

?-

owns(john, x).

x = car(chery).

?- owns(john, _)

true.

?- owns(john, _)
who = john

?- owns(john, _)
false.

?- owns(john, _)
x = car(chery)

result

und

? - owns(who, car(chery))
who = john

? - owns(jane, x). Sedan(x),
false.

? - owns(jane, x), truck(x).
x = car(chery).

Result:

The program for prolog terminologies
and write basic program.