

EXPNO: 12

TITLE: INTRODUCTION TO PROLOG

① ATOMIC TERMS:-

They are strings usually made of upper case and lower case alphabets, digits and underscore, starting with lower case letter.

Eg: dog, ab-c-321

② VARIABLES:-

They are strings of letters, digits and underscore.

Eg: Dog, Apple-420

③ COMPOUND TERMS:-

Compound terms are made up of a prolog atom and a number of arguments enclosed in parenthesis separated by commas.

Eg: is-bigger(elephant, X)

④ Facts:-

A fact is a predicate followed by a dot.

Eg: bigger-animal(Whale)

⑤ RULES:-

A rule consists of a head and a body.

Eg: is-smaller(X, Y) :- is-bigger(X, X)

SOURCE CODE

KB1

Woman(mia)
Woman(jody)
Woman(yolanda)
playsAirGuitar(jody)
party

O/P

Woman(mia) → true
playsAirGuitar(mia) → false
Party → true
concert → unknown

KB2

happy(yolanda)
listens2music(mia)
listens2music(yolanda) :- happy(yolanda)
playsGuitar(mia) :- listens2music(mia)
playsAirGuitar(yolanda) :- listens2music(yolanda)

O/P

playsGuitar(mia) → true
playsGuitar(yolanda) → true

KB3

likes(dan,sally)
likes(sally,dan)
likes(john,brittany)
married(x,y) :- likes(x,y), likes(y,x)
friends(x,y) :- likes(x,y), likes(y,x)

O/P

likes(dan,x) → x=sally
married(dan,sally) → true
married(john,brittany) → false