**EX.NO:** 7

**DATE:** 

## **INTRODUCTION TO PROLOG**

#### <u>AIM</u>

To learn PROLOG terminologies and write basic programs.

#### **TERMINOLOGIES**

• Atomic Terms: -

Atomic terms are usually strings made up of lowerand uppercase letters, digits, and the underscore, starting with a lowercase letter.

Ex:

dog ab c 321

• Variables: -

Variables are strings of letters, digits, and the underscore, starting with a capital letter or an underscore.

Ex:

Dog
Apple\_420

• Compound Terms: -

Compound terms are made up of a PROLOG atom and a number of arguments (PROLOG terms, i.e., atoms, numbers, variables, or other compound terms) enclosed in parentheses and separated by commas.

Ex:

```
is_bigger(elephant,X) f(g(X, ),7)
```

- Facts: -
  - fact is a predicate followed by a dot.

Ex:

```
bigger_animal(whale).
life is beautiful.
```

- Rules: -
  - rule consists of a head (a predicate) and a body (a sequence of predicates separated by commas).

Ex:

```
is_smaller(X,Y):-is_bigger(Y,X).
aunt(Aunt,Child):-sister(Aunt,Parent),parent(Parent,Child).
```

### **CODE:**

```
SWISH File Edit Examples Help

Program 

likes(john,brittney).

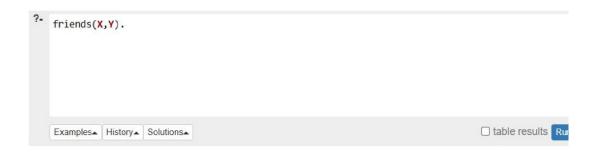
likes(dan,sally).

likes(sally,dan).

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

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

### **OUTPUT: -**





# **RESULT:**

Thus the program is successfully executed and output is verified