## EX.NO: 07

## INTRODUCTION TO PROLOG

**AIM :**

To learn PROLOG terminologies and write basic programs.

**TERMINOLOGIES:**

1. Atomic Terms: -
   Atomic terms are usually strings made up of lower- and uppercase letters, digits, and the underscore, starting with a lowercase letter.
   Ex:
   dog
   ab_c_321
2. Variables: -
   Variables are strings of letters, digits, and the underscore, starting with a capital letter or an underscore.
   Ex:
   Dog
   Apple_420
3. 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)
4. Facts: -
   A fact is a predicate followed by a dot.
   Ex:
   bigger_animal(whale).
   life_is_beautiful.
5. Rules: -
   A rule consists of a head (a predicate) and a body (a sequence of predicates separated by comma

**CODE :**

SWISH File Edit Examples Help

Program

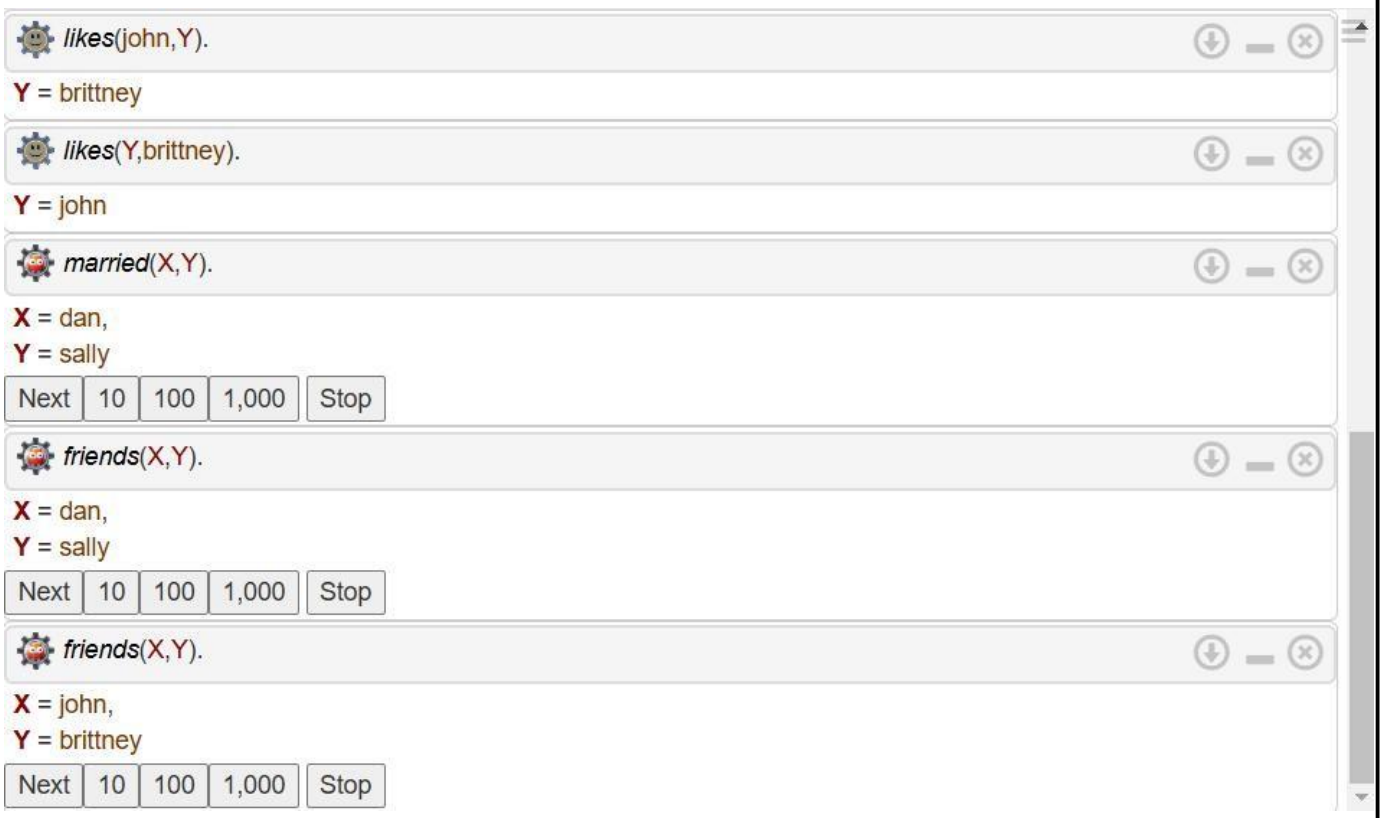
```
1 likes(john,brittney).
2 likes(dan,sally).
3 likes(sally,dan).
4 married(X,Y) :- likes(X,Y) , likes(Y,X).
5 friends(X,Y) :- likes(X,Y) ; likes(Y,X).
6
```

**OUTPUT :**

**GIVING QUERY:**

```
?- friends(X,Y).
```

Examples History Solutions table results Run!




**RESULT :**

Thus, the implementing of PROLOG terminologies is successfully executed and the output is verified.