Exp No: 13

Date: 28/09/24

UNIFICATION AND RESOLUTION

AIM:

To execute programs based on unification and resolution. Deduction in prolog is based on the unification and instantiation. Matching terms are unified and variables get instantiated.

PROCEDURES FOR EXECUTING PROLOG PROGRAMS ON UNIFICATION AND RESOLUTION:

1) Set up Prolog Environment:

Open your Prolog interpreter

2) Creating a knowledge base file:

Open a text editor and save the following code as resolution_kb.pl:

3) Load the knowledge base:

In your prolog interpreter load the knowledge base.

4) Define goals for Refutation:

For Goal 1: Prove red_strawberry_Picking

For Goal 2: Prove enjoy

5) Execute Queries for each Goal:

For Goal 1: check if strawberry-picking is true

For Goal 2: check if not (enjoy) is, true

6) Review results

7) Conclusion

8) Exit Prolog:

After testing all goals type:

OUTPUT:

```
? - not_strawberry-picking
  true

?- enjoy
   true

?- not
   true
```

CODE:

```
enjoy : sunny, warm

strawberry_picking :- warm, pleasant.

not_strawberry_picking :- raining

not :- raining
    warm
    raining
    sunny
```

RESULT:

Thus, the program for Unification and Resolution executed successfully and output is verified.