

## Experiment - 6

### Unification and Resolution

#### AIM

To execute programs based on unification and resolution.

#### PROGRAM

```
from pysnip import Prolog

prolog = Prolog()

prolog.assertz ("enjoy :- sunny, warm")
prolog.assertz ("strawberry - picking :- warm, pleasant")
prolog.assertz ("not strawberry - picking :- raining")
prolog.assertz ("wet :- raining")
prolog.assertz ("warm")
prolog.assertz ("raining")
prolog.assertz ("sunny")
prolog.assertz ("pleasant")

def check_goal(goal):
    result = list(prolog.query(goal))
    if result:
        print(f"{goal} : True")
    else:
        print(f"{goal} : False")

check_goal("enjoy")
check_goal("strawberry - picking")
check_goal("wet")
```

## OUTPUT

enjoy: True

strawberry-picking: True

wet: True

```
1 from pyaut import Prolog
2
3 # Initialize Prolog instance
4 prolog = Prolog()
5
6 # Define Prolog rules and facts
7 prolog.assertz("enjoy :- sunny, wet")
8 prolog.assertz("strawberry-picking")
9 prolog.assertz("not-strawberry-picking")
10 prolog.assertz("wet :- raining")
11 prolog.assertz("sunny")
12 prolog.assertz("raining")
13 prolog.assertz("sunny")
14 prolog.assertz("pleasure") # Add enjoy: True
15
16 # Define a function to check and print
17 def check_goal(goal):
18     result = first(prolog.query(goal))
19     if result:
20         print(f"{goal}: True")
21     else:
22         print(f"{goal}: False")
23
24 # Query the goals
25 check_goal("enjoy") # Goal 1: True
26 check_goal("strawberry-picking") #
27 check_goal("wet") # Goal 3: True
28
```

## RESULT

Thus, the program for unification and resolution is successfully executed and the output is verified.