Date:15.10.25

# TASK:10 Implement simple facts using python

Implement simple fact for following:

CO5 S3

- a. Ram likes mango.
- b. Seema is a girl.
- c. Bill likes Cindy.
- d. Rose is red.
- e. John owns gold.

**Tool-Python** 

AIT Lab-Task 10 VTU24617/B.GIRISH S8L7

Date:15.10.25

### **TASK:10**

## Implement simple facts using python

#### AIM:

To implement simple facts and verify using python

### **ALGORITHM:**

Step:1Define a list of facts containing the statements to be verified.

Step:2 Create a function named verify\_fact that takes a fact as input and returns a boolean value indicating whether the fact is true or false.

Step:3 In the verify\_fact function:

- a. Remove the trailing period from the fact using the rstrip function.
- b. Check the fact against the known conditions to determine its truth value. You can use conditional statements (if, elif, else) for this.
  - If the fact matches a known condition, return True to indicate that the fact is true.
  - If the fact does not match any known condition, return False to indicate that the fact is false.

Step:4 Iterate over each fact in the list of facts:

- a. Call the verify\_fact function for each fact.
- b. Print the fact and the corresponding "Yes" or "No" based on its truth value.

### **PROGRAM:**

```
# Define a list of facts
facts = [
  "john_is_cold.",
                            # john is cold
  "raining.",
                         # it is raining
  "john_Forgot_His_Raincoat.", # john forgot his raincoat
  "fred_lost_his_car_keys.", # fred lost his car keys
  "peter_footballer."
                             # peter plays football
]
# Function to check if a fact is true
def verify_fact(fact):
  # Remove the trailing period
  fact = fact.rstrip(".")
  # Perform some logic to verify the fact
  if fact == "john_Forgot_His_Raincoat":
     return True
  elif fact == "raining":
     return True
  elif fact == "foggy":
     return True
  elif fact == "Cloudy":
     return False # Assume it's not cloudy
  else:
     return False
# Verify each fact
for fact in facts:
  if verify_fact(fact):
     print(f"{fact} - Yes")
  else:
     print(f"{fact} - No")
```

## **OUTPUT:**

```
PS C:\Users\saikm\OneDrive\Desktop\K MOHANASAI VTU26132> & C:/Python314/python.exe "c:/Users/saikm/OneDrive/Desktop/K MOHANASAI VTU26132/task10.py"
john_is_cold. - No
raining. - Yes
john_Forgot_His_Raincoat. - Yes
fred_lost_his_car_keys. - No
peter_footballer. - No
PS C:\Users\saikm\OneDrive\Desktop\K MOHANASAI VTU26132>
```

## **RESULT:**

Thus, the implementation of simple facts using python was successfully executed and output was verified.