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

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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\karna\AppData\Local\Programs\Microsoft VS Code> & C:\Users\karna\AppData\Local\Programs\Python\Python313\python.exe c:/Users\karna\tu26619.cv2.py
john_is_cold. - No
raining. - Yes
john_Forgot_His_Raincoat. - Yes
fred_lost_his_car_keys. - No
peter_footballer. - No
```

RESULT:

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