

Date:17.10.25

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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AIM:

To implement simple facts and verify using python

ALGORITHM:

Step:1 Define 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:

```
File Edit Shell Debug Options Window Help
Python 3.13.3 (tags/v3.13.3:6280bb5, Apr  8 2025, 14:47:33) [MSC v.1943 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.

>>> ===== RESTART: C:/Users/aresh/OneDrive/Desktop/vtu26450/TASK9.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.