

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

TASK:10

Implement simple facts using python

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:

```
Python 3.13.5 (v3.13.5:6cb20a219a8, Jun 11 2025, 12:23:45) [Clang 16.0.0 (clang-1600.0.26.6)] on darwin
Enter "help" below or click "Help" above for more information.
>>>
===== RESTART: /Users/sangasravva/Documents/VTU-27286.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.