

**Date:17.10.25**

**TASK:10**

Implement simple facts using python

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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:**

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.