

**Date:15.10.25**

**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:

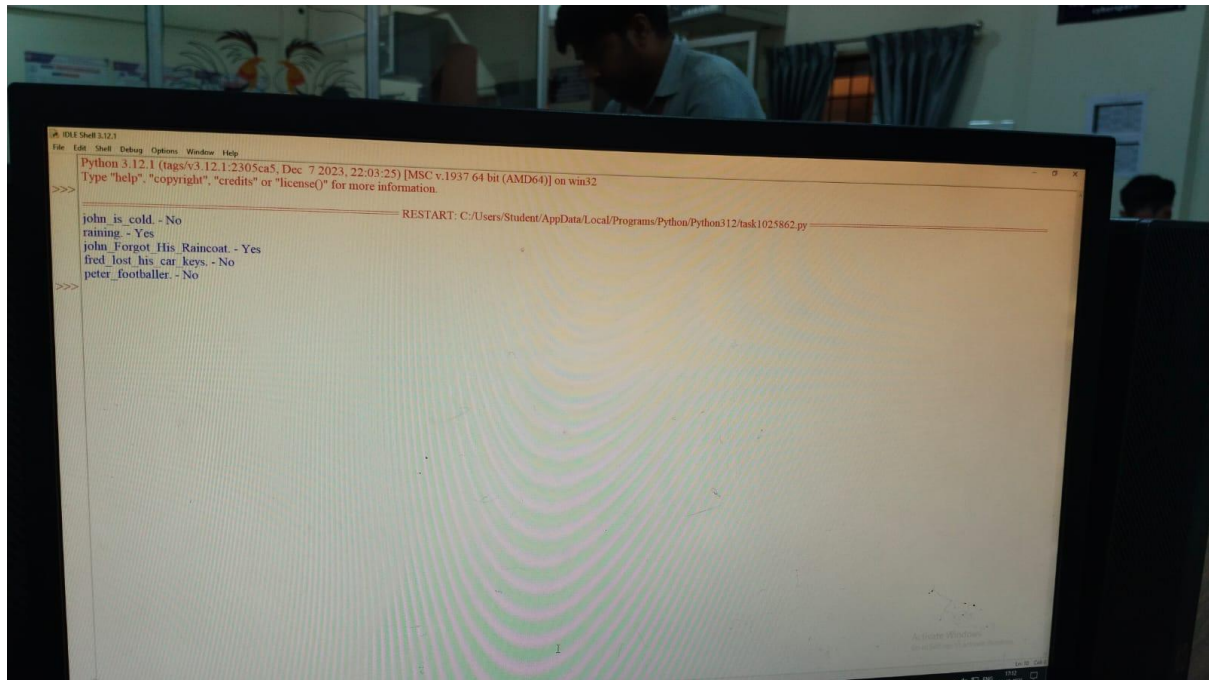
```
# Define a list of facts
facts = [
    "john_is_cold.",          # john is cold
    "raining.",              # it is raining
    "john_Forgot_His_Raincoat.", # john forgot his raincoat
    "fred_lost_his_car_keys.", # fred lost his car keys
    "peter_footballer."      # peter plays football
]

# 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:

A photograph of a computer monitor displaying a Python IDE window. The window title is 'IDLE Shell 3.12.1'. The menu bar includes 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The status bar at the bottom indicates 'Python 3.12.1 (tags/v3.12.1:2305ca5, Dec 7 2023, 22:03:25) [MSC v.1937 64 bit (AMD64)] on win32'. The main text area shows the output of a script with the following lines: '>>>' followed by a blank line, then 'john\_is\_cold. - No', 'raining. - Yes', 'john Forgot His Raincoat. - Yes', 'fred lost his car keys. - No', and 'peter\_footballer. - No'. A 'RESTART' button is visible in the top right corner of the text area. The background of the photo shows a person in a light blue shirt looking at the screen in a dimly lit room.

## RESULT:

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