

**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**

**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:**

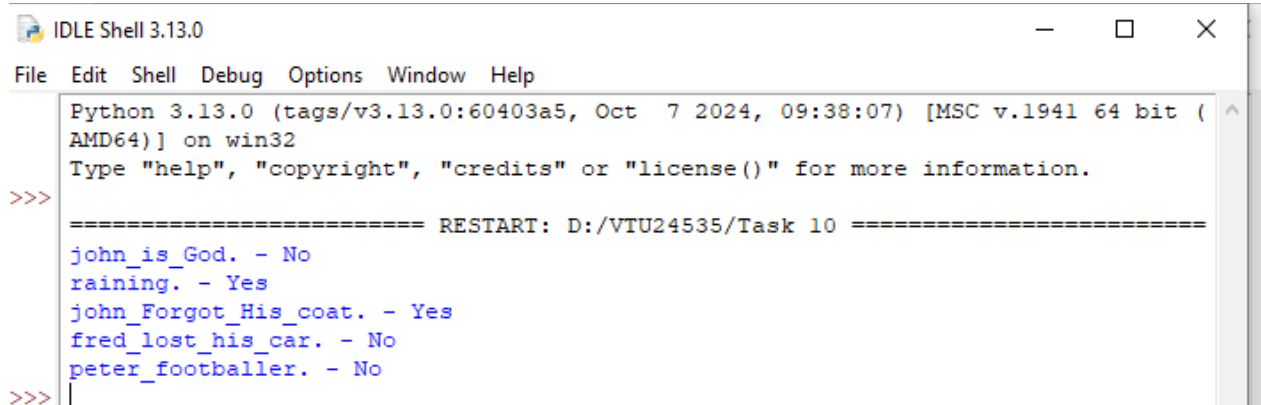
```
# Define a list of facts
facts = [
    "john_is_God.",          # john is God
    "raining.",             # it is raining
    "john_Forgot_His_coat.", # john forgot his coat
    "fred_lost_his_car.",    # fred lost his car
    "peter_footballer."     # peter plays football
]

# 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_coat":
        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 screenshot of an IDLE Shell 3.13.0 window. The window has a title bar with the text 'IDLE Shell 3.13.0' and standard window controls (minimize, maximize, close). Below the title bar is a menu bar with 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The main text area shows the following output: 'Python 3.13.0 (tags/v3.13.0:60403a5, Oct 7 2024, 09:38:07) [MSC v.1941 64 bit (AMD64)] on win32', 'Type "help", "copyright", "credits" or "license()" for more information.', followed by a red prompt '>>>'. Then, a separator line '===== RESTART: D:/VTU24535/Task 10 =====' is shown. Below this, several lines of output are displayed in blue text: 'john\_is\_God. - No', 'raining. - Yes', 'john\_Forgot\_His\_coat. - Yes', 'fred\_lost\_his\_car. - No', and 'peter\_footballer. - No'. A final red prompt '>>>' is at the bottom with a cursor line.

```
Python 3.13.0 (tags/v3.13.0:60403a5, Oct 7 2024, 09:38:07) [MSC v.1941 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:/VTU24535/Task 10 =====
john_is_God. - No
raining. - Yes
john_Forgot_His_coat. - Yes
fred_lost_his_car. - No
peter_footballer. - No
>>>|
```

## RESULT:

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