

## 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:

```

===== RESTART: C:/Users/student/AppData/Local/Programs/Python/Python313/task 10 ait.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.