

## 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.