

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_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

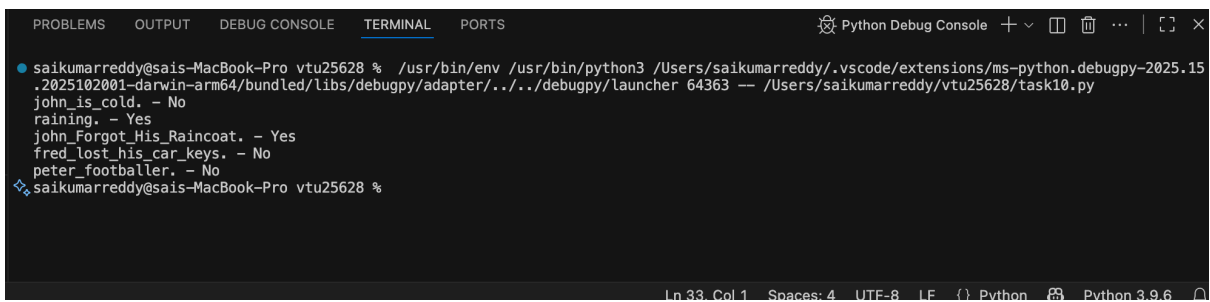
```
def verify_fact(fact):  
    # Remove the trailing period  
    fact = fact.rstrip(".")  
  
    # Perform some logic to verify the fact  
    if fact == "john_Forgot_His_Raincoat":  
        return True  
    elif fact == "raining":  
        return True  
    elif fact == "foggy":  
        return 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:



The screenshot shows a VS Code terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Python Debug Console + - [] ... | [] X
saikumarreddy@sais-MacBook-Pro vtu25628 % /usr/bin/env /usr/bin/python3 /Users/saikumarreddy/.vscode/extensions/ms-python.debugpy-2025.15
.2025102001-darwin-arm64/bundled/libs/debugpy/adapter/../../debugpy/launcher 64363 -- /Users/saikumarreddy/vtu25628/task10.py
john_is_cold. - No
raining. - Yes
john_Forgot_His_Raincoat. - Yes
fred_lost_his_car_keys. - No
peter_footballer. - No
saikumarreddy@sais-MacBook-Pro vtu25628 %
```

The status bar at the bottom indicates: Ln 33, Col 1, Spaces: 4, UTF-8, LF, Python, Python 3.9.6.

RESULT:

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