Date:- 06/08/2025

Task 3:- Importing Python modules and packages in python programming

a) Weather Robot using libraries.

Aim:- To write a python program that displays the current date and time along with weather info in the format, Wednesday, 06 August 2025, 07:35 PM

Algorithm:-

1) Start the program
2) Import the datetime module.
3) Get the current date and time using date time now()
4) Format the data and time using strftime.
5) Display the formatted result
6) End the program.

Program:-

```
from datetime import datetime
now = datetime.now()
formatted_time = now.strftime("%A, %d %B %Y %I:%M %p")
print("Current Date and Time:", formatted_time)
```

output:-

current Date and Time : Wednesday
06 August 2025, 12:30 pm.

Result: The program successfully imported the date time module and displayed the current date and time in the required format.

b) Create and use your own module

Aim:- to create a custom module with math functions and use them in the main program.

Algorithm:-

1. Create a python file named mymath.py
2. Define two function inside it factorial (n) and is_prime (n).
3. Create a main program to import mymath and use both functions.
4. Display the results
5. End the program.

module:- mymath.py

```
def factorial (n):
    result = 1
    for i in range (1, n+1):
        result *= i
    return result

def is_prime (n):
    if n<= 1
    return False.
```

<u>output:-</u>

factorial of 5 is 120

is 17 prime ? True.

```
for i in range(2,int(num**0.5)+1):
    if num%i==0:
    return false
return true.
```

program:-

```
import mymath
print('factorial of 5:',mymath.factorial(5))
print(' is it prime ?',mymath.is_prime(11))
```

Result:- the custom module mymath was created and successfully used in the main program.

c. currency converter using a custom package.

Aim:- To create a package with a module to convert currency from INR to USD.

Algorithm:-

1. Create a package folder named currency.
2. Inside it, create a file converter.py
3. Define a function convert(amount rate) in it.
4. In the main program, import the module and use the function.
5. Display the result.
6. End the program.

module:- converter.py

```
def convert(amount,rate):
    return amount * rate
```

Program:-

```
from currency import converter
inr = amount = 1000
usd = rate = 0.012
```

output:-

INR to USD : 120

usd_amount = converter.convert(inr_amount, usd_rate)

print("%f INR to USD = %f", usd_amount)

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EX NO.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	25
SIGN WITH DATE	13/6

Result: The custom package and module were successfully used to convert INR to USD.