06.08.2025

Task3: Importing python modules and Packages in python programming

(a) weather Report using datetime

Aim:

To write a python program that displays the current date and time along with weather info in the format: wednesday, 06 August 2025, 07:30 PM

Algorithm:

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

Program:

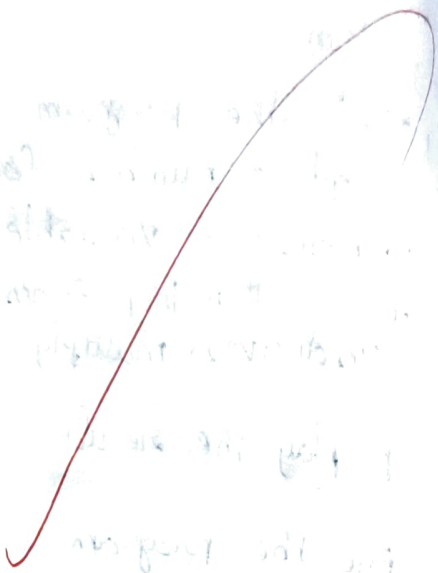
```
Form datetime import datetime
now = datetime.now()
formatted_time = now.strftime("%A, %d %B %Y, %I
    %M %p")
Print ("Current Date and Time:", formatted_time)
```

Result:

The program successfully imported the datetime module and displayed the current date and time in the required format

Output:

Current Date and Time: Wednesday, 06 Aug 2025, 7:30PM



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
    for i in range(2, int(n**0.5)+1):
        if n%i==0:
            return False
    return True
```

output:

Factorial of 5 : 120
is 17 prime? True

Program:

```
import mymath
print('Factorial of 5:', mymath.factorial(5))
print('is 17 prime?', mymath.is_prime(17
```

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 middle 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
usd_amount = converter.convert(inr_amount, usd_rate)
print('INR to USD:', usd_amount)
```

VEL TECH - CSE	
NO.	3
RFORMANCE (5)	5
ULT AND ANALYSIS (5)	5
VA VOCE (5)	5
CORD (5)	-
OTAL (20)	15
WITH DATE	

Result

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

output:

INR to USD : 12.0