

3.	06/08/25	Importing python modules and packages in python programming.	15	13/8/22
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Sample Output:-

Current Date & Time: Wednesday, 06 August 2025, 07:30 pm

VEL TECH - CSE	
EX NO.	
PERFORMANCE (5)	
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The program is designed to calculate the factorial of the entered number.

6/8/25

Task-3: Importing Python Modules And Packages In Python Programming

a. Weather Report Using datetime:-

Aim:-

To display the current date and time in the specified format using the datetime module.

Algorithm:-

1. Import the datetime module.
2. Get the current date and time using datetime.now().
3. Format the date and time using strftime() to match the required format:

"Day , DD Month YYYY , HH:MM & AM/PM."

4. Display the formatted date and time.

Program:-

```
#weather - report.py
```

```
import datetime
```

```
# step 2: Get current date and time
```

```
now = datetime.datetime.now()
```

```
# step 3: Format
```

```
formatted = now.strftime("%A, %d, %B, %Y, %I : %M %P")
```

```
# step 4: Display
```

```
print("Current Date & Time: ", formatted)
```

Result:-

Successfully displayed the current date and time in the specified format using the datetime module.

18/25

b. Create and Use Your Own Module

Aim:-

To create a custom math module with factorial () and is-prime () functions, and use them in a main program.

Algorithm:-

1. Create a file mymath.py.
2. In mymath.py, define:
 - factorial(n) → calculates factorial of n.
 - is-prime(n) → checks if n is a prime number.
3. Create a main program to import and use mymath functions.
4. Display the results.

Program:-

```
# mymath.py

def factorial(n):
    if n == 0 or n == 1:
        return 1
    return n * factorial(n - 1)

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

# main.py
import mymath

num = 5
print(f"Factorial of {num} :", mymath.factorial(num))

check_num = 11
print(f"Is {check_num} Prime ? :", mymath.is-prime(check_num))
```


(1) function will calculate factorial of a number and return it as a value.

if number is 0, the function will return 1.

if number is 1, the function will return 1.

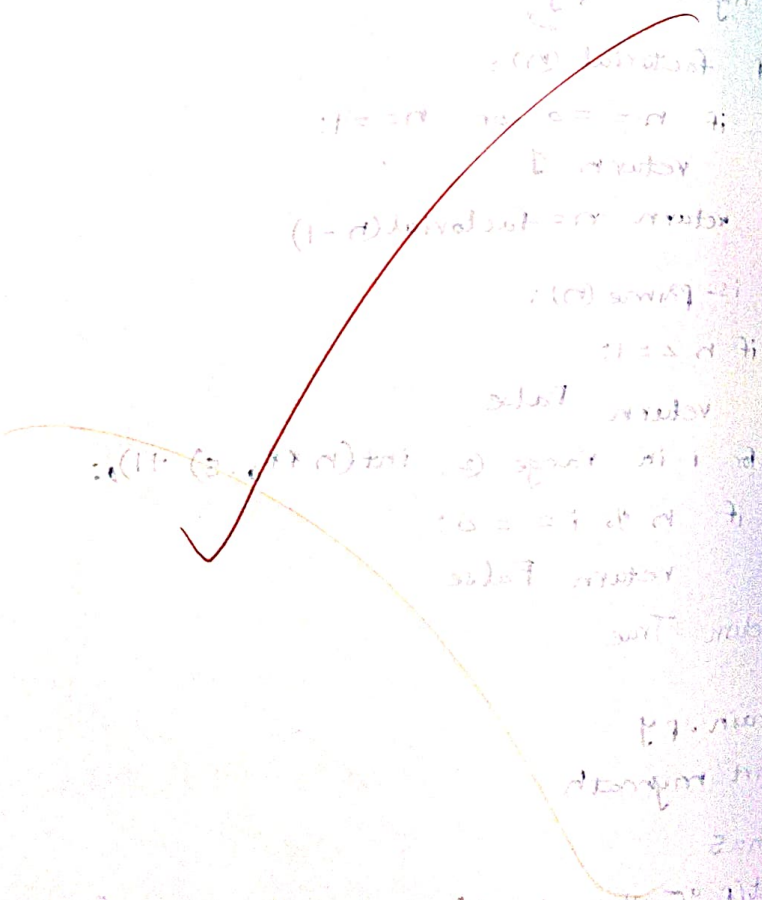
if number is 2, the function will return 2.

if number is 3, the function will return 6.

Sample Output:

Factorial of 5: 120

Is 11 prime? : True

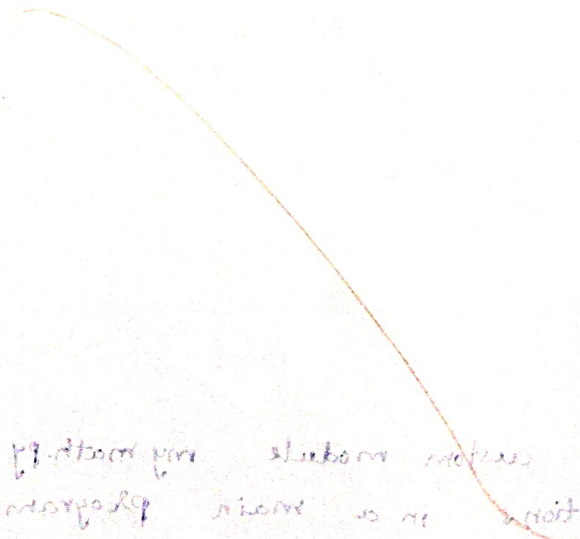
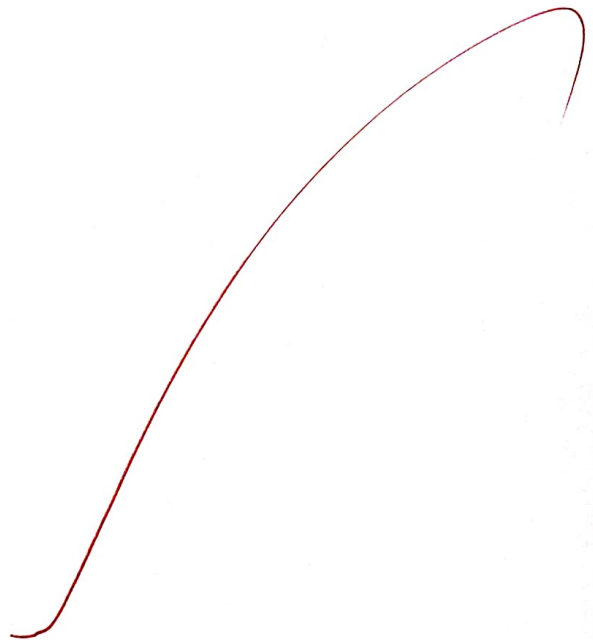


Result :-

Created a custom module mymath.py and successfully used its functions in a main program.

Sample Output:-

1000 INR = 12.00 USD



Handwritten text at the bottom of the page, possibly a signature or a note.

15000
3500

5500

6990

6/8/25 C. Currency Converter Using A Custom Package

Aim:-

To create a custom package for currency conversion and use it to convert INR to USD.

Algorithm:-

1. Create a folder currency.
2. Inside currency, create:
 - - init-.py (empty file to make it a package)
 - converter.py containing a convert(amount, rate) function.
3. Create a main program to import and use currency.converter.
4. Display the converted currency value.

Program:-

```
# currency/converter.py
def convert(amount, rate):
    return amount * rate
```

main.py

```
# main.py
```

```
from currency import converter
```

```
amount_in_inr = 1000
```

```
rate_inr_to_usd = 0.012 # Example rate
```

```
amount_in_usd = converter.convert(amount_in_inr, rate_inr_to_usd)
print(f"{amount_in_inr} INR = {amount_in_usd:2f} USD")
```

VEL TECH - CSE	
EX NO.	13
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	5
TOTAL (20)	25

Result:-

Successfully created a custom package for currency conversion and converted INR to USD.