*Program:-

```
def add (a,b):
    return a+b
def subtract (a,b):
    return a-b
def multiply (a,b):
    return a*b
def divide (a,b):
    return a/b
```

```
import mymath
a=10
b=5
print ("Addition:", mymath.add(a,b))
print ("Subtraction:", mymath.subtract(a,b))
print ("Multiplication:", mymath.multiply(a,b))
print ("Division:", mymath.divide(a,b))
```

Date:- 11/8/25

TASK-3 :- Importing python modules and packages in python programming.

Aim:- To write python demonstrating importing python modules and packages.

(a) You are tasked with developing a modular Calculator application in python. The Calculator should support basic arithmetic operations : addition, subtraction, multiplication and division. Each operation should be implemented in a separate module. Additionally, you should create a main program to handle user input, call the appropriate module and display the result.

Algorithm:-

1. Define functions for addition, subtraction, multiplication and division.
2. Handle division by zero by raising an error if the divisor is zero.
3. Import the module (mymath) containing these functions.
4. Initialize two numbers (a=10, b=5).
5. Call each function using mymath.<function_name>(a,b).
6. Print the results of all operations.

Output:- Addition : 15
Subtraction: 5
Multiplication: 50
Division: 2.0

* Program:-

1. Create the mathfunctions.py module:-

```
def add(a,b):
    return a+b
def Subtract(a,b):
    return a-b
def multiply(a,b):
    return a*b
def divide(a,b):
    return a/b
```

2. Create the areafunctions.Py module:-

```
import math
def circle_area(radius):
    return math.pi * radius * radius
def rectangle_area(length, width):
    return length * width
def triangle_area(base, height):
    return 0.5 * base * height
```

3. Create _init_.py in each package folder (pack1 and pack2)

```
from .mathfunctions import add, subtract, multiply, divide
from .areafunctions import circle_area, rectangle_area, triangle_area
```

4. Create the main.py file.

```
from pack import mathfunctions
```

(b) You are working on a python project that requires you to perform various mathmatical operations and geometric area calculations. To organize your code better, you decide to create a Package named mypackage which includes subpackages.

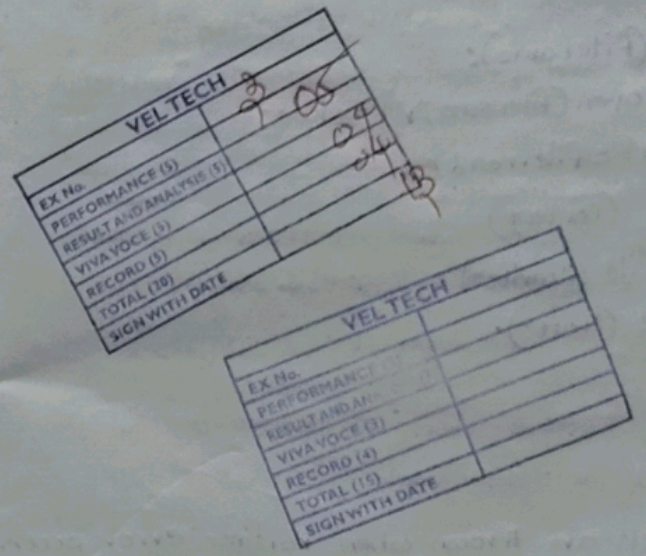
Algorithm:-

1. Create mathfunctions.Py module:
2. Create areafunctions.Py module:
3. Create _init_.Py files in pack1 and pack2.
4. Create main.Py:
5. Print the output as expected.

```
from pack import areafunctions
# using math functions
print ("Addition:", mathfunctions.add(10,5))
print ("Subtraction:", mathfunctions.sub(10,5))
print ("Multiplication:", mathfunctions.mult(10,5))
print ("Division:", mathfunctions.divide(10,5))
# using area functions.
print ("Circle Area (radius=7): ", areafunctions.circle_area(7)).
print ("Rectangle Area (5x10):", areafunctions.rectangle_area(5,10))
print ("Triangle Area (base=6, height=8):", areafunctions.triangle_area(6,8)
```

Output:-

```
Addition :- 15
Subtraction:- 5
Multiplication:- 50
Division:- 2.0
Circle Area (radius=7) : 153.93804002589985
Rectangle Area (5x10) : 50
Triangle Area (base=6, height=8) : 24.0
```







RESULT:- Thus, the program for importing python modules and packages was successfully executed and the output was verified.