

## Experiment No: 1 - Arithmetic Operations Demonstration Program

### Aim

To design and implement a Python program that demonstrates the use of **all arithmetic operators** by performing calculations on two input numbers using **sequential control structures**.

### Problem Statement

Write a Python program to perform the following operations using **arithmetic operators**:

- Addition (+)
- Subtraction (-)
- Multiplication (\*)
- Division (/)
- Modulus (%)
- Floor Division (//)
- Exponentiation (\*\*)

The program should:

- Accept two integer values from the user
- Perform each arithmetic operation sequentially
- Display the result of each operation clearly

### Constraints

- Input values must be integers
- Second number should not be zero (to avoid division error)

### Input

- First integer number
- Second integer number

### Output

- Sum of the two numbers
- Difference of the two numbers
- Product of the two numbers
- Quotient (division result)
- Remainder
- Floor division result
- Power result

### Concepts Used

- Arithmetic operators
- Sequential control structure
- Input and output statements

### Result

Thus, a Python program demonstrating the use of **all arithmetic operators** using **sequential execution** was successfully designed and implemented.

#### Sample Input:

Enter First Number: 12  
Enter Second Number: 5

#### Sample Output:

Addition (+) : 17  
Subtraction (-) : 7  
Multiplication (\*) : 60  
Division (/) : 2.4  
Modulus (%) : 2  
Floor Division (//) : 2  
Exponentiation (\*\*) : 248832