

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
```