Practical No 4

Aim

Write a Python program to explore basic arithmetic operations. The program should prompt the user to enter two numbers and then perform addition, subtraction, multiplication, division, and modulus operations on those numbers. The results of each operation should be displayed to the.

Apparatus / Software Required

- Python Interpreter (Python 3.14.2)

Theory

`input()` Function

- Used to accept input from the user.
- Input is received as a string.

`float()` Function

- Converts input into decimal values.
- Allows operations on real numbers.

Variables

- Used to store values and results.
- Examples: `num1`, `num2`, `addition`, `division`

`print()` Function

- Displays output on the screen.

- **Arithmetic Operators Used**

Operator	Name	Description	Example
+	Addition	Adds two numbers	`10 + 5 = 15`
-	Subtraction	Subtracts second number from first	`10 - 5 = 5`
*	Multiplication	Multiplies two numbers	`10 * 5 = 50`
/	Division	Returns quotient (float value)	`10 / 4 = 2.5`
%	Modulus	Returns remainder	`10 % 3 = 1`
//	Floor Division	Returns quotient without decimal part	`10 // 3 = 3`
**	Exponentiation	Raises number to the power	`2 ** 3 = 8`

Algorithm

1. Start
2. Input first number (num1)
3. Input second number (num2)
4. Calculate Addition → **sum = num1 + num2**
5. Calculate Subtraction → **diff = num1 - num2**
6. Calculate Multiplication → **prod = num1 * num2**
7. Calculate Division → **div = num1 / num2**
8. Calculate Modulus → **mod = num1 % num2**
9. Calculate Floor division → **mod = num1 // num2**
10. Calculate Floor division → **mod = num1 ** num2**
11. Display the results of all operations
12. Stop

Program Code

Output

Conclusion