**📝 Day 3 – Home Assignments: Operators & Expressions**

**🔹 Part A: Arithmetic Practice**

1. Take two numbers from the user and perform:
   * Addition
   * Subtraction
   * Multiplication
   * Division
   * Floor Division
   * Modulus
   * Exponentiation

Format your output nicely using f-strings.  
Example:

print(f"Sum of {a} and {b} is {a+b}")

**🔹 Part B: Comparison Operators**

1. Take age as input from the user and check if:
   * The person is **18 or older**
   * The person is a **senior citizen (>= 60)**
2. Take two numbers and check:
   * Which one is greater
   * Whether they are equal

**🔹 Part C: Logical Operators**

1. Create a login check:
   * Ask for username and password
   * If both match predefined values (e.g., "admin" and "1234"), print "Login successful"
   * Else, print "Invalid credentials"
2. Ask the user to enter a number between 100 and 500:
   * Use logical operators to validate the input range.

**🔹 Part D: Expression Evaluation**

1. Evaluate the following expressions:

print(5 + 3 \* 2)

print((5 + 3) \* 2)

print(10 - 3 \*\* 2 + 4)

print(100 // 3 % 2)

* + Write comments explaining **why** each output is as it is based on operator precedence.

1. Write a small calculator program:
   * Ask user to enter two numbers and an operator (+, -, \*, /)
   * Based on the operator, perform and display the result

Enter first number: 10

Enter second number: 5

Enter operator: \*

Output: 10 \* 5 = 50