

Module 1 Critical Thinking Assignment

HEADER: file name, author, institution, module, date, and description

Function for user input

FUNCTION user_input() RETURNS tuple[float, float]

 PRINT "Provide a number:"

 INPUT num1

 PRINT "Provide a number:"

 INPUT num2

 RETURN (num1, num2)

Function that calculates and prints results

FUNCTION calculate_and_print_results(num1: float, num2: float) RETURNS None

 PRINT "Part 1: Addition and Subtraction"

 PRINT "Addition: ", CALL add_numbers(num1, num2)

 PRINT "Subtraction: ", CALL subtract_numbers(num1, num2)

 PRINT "Part 2: Multiplication and Division"

 PRINT "Multiplication: ", CALL multiply_numbers(num1, num2)

 PRINT "Division: ", CALL divide_numbers(num1, num2)

Function that adds 2 numbers

FUNCTION add_numbers(num1: float, num2: float) RETURNS float

 return num1 + num2

Function that subtracts 2 numbers

FUNCTION subtract_numbers(num1: float, num2: float) RETURNS float

 RETURN num1 - num2

Function that multiplies 2 numbers

FUNCTION multiply_numbers(num1: float, num2: float) RETURNS float

 RETURN num1 * num2

Function that divides 2 numbers

FUNCTION divide_numbers(num1: float, num2: float) RETURNS float OR None

 TRY

 RETURN num1 / num2

 EXCEPT ZeroDivisionError

 PRINT "Error: can't divide by zero"

Main function

FUNCTION main() RETURNS None

 num1, num2 = CALL user_input()

 CALL calculate_and_print_results(num1, num2)

Entry point of the program

IF __name__ == '__main__'

 CALL main()