Simple Calculator

Introduction:

A simple command-line calculator program written in Python that supports basic arithmetic operations such as addition, subtraction, multiplication, and division.

Features:

1. Addition
2. Subtraction
3. Multiplication
4. Division (with error handling for division by zero)

Requirements: Python 3.x(updated version)

Project Structure:

simple-calculator

( main.py ) The main script where the calculator logic is implemented.

( utils.py) Contains utility functions like input validation and result display.

(testcode)Unit tests for the calculator functions.

Installation:

To run the simple calculator, follow these steps:

1. Clone the repository:

git clone <repository-url>

cd simple-calculator

2. Make sure Python 3 is installed on your system.

3. Run the calculator script: python main.py

Usage:

After running the script, the program will prompt you to choose an operation. You can enter one of the following:

1. Add

2. Subtract

3. Multiply

4. Divide

Once you select an operation, the program will ask for two numbers, perform the calculation, and display the result.

Example:

Simple Calculator

Select operation:

1. Add

2. Subtract

3. Multiply

4. Divide

Enter choice (1/2/3/4): 1

Enter first number: 5

Enter second number: 3

The result of 5.0 + 3.0 is: 8.0

Functions:

add(x, y):adding of two numbers

Parameters: x: The first number, y: The second number.

Returns: The sum of x and y.

subtract(x, y): Subtracts the second number from the first.

Parameters: x: The first number, y: The second number

Returns: The result of x - y.

multiply(x, y): Multiplies two numbers

Parameters: x: The first number,y: The second number.

Returns: The product of x and y.

divide(x, y): Divides the first number by the second.

Parameters: x: The numerator,y: The denominator.

Returns:

The result of x / y, or an error message if y is zero.

The result of x / y, or an error message if y is zero.

get\_number\_input(prompt)

Prompts the user for input and ensures that the input is a valid number.

Parameters:

prompt: The message to display to the user.

Returns: A valid floating-point number.

Display result(operation, num1, num2, result)

Displays the result of an operation in a formatted way.

Parameters: operation: The operation (e.g., +, -, \*, /).

num1: The first number.

num2: The second number.

result: The result of the operation.

Returns:finally prints the correct and required output by performing an operation which is choosen and performed on operands.