**Title:** Simple Calculator

**Description**

This Python program implements a simple calculator that performs basic arithmetic operations such as addition, subtraction, multiplication, and division on two user-provided numbers. The user is prompted to enter two numbers and select an operation from a list of valid choices. The program then calculates and displays the result of the chosen operation. It also handles division by zero and provides error handling for invalid operations.

**Functions**

1. **data\_required()**

This function collects user input for two numbers (num1 and num2) and the desired operation (operation).

It returns a tuple containing the user-provided values.

1. **valid\_operation(operation)**

This function checks whether the provided operation is valid by comparing it to a list of valid choices.

It returns True if the operation is valid and False otherwise.

1. **perform\_operation(num1, num2, operation)**

This function performs the arithmetic operation specified by the operation on num1 and num2.

It handles various cases, including addition, subtraction, multiplication, division, floor division, and exponentiation.

**If division by zero is attempted, it returns an error message**.

It raises a **ValueError** for invalid operations.

The result of the operation is returned.

1. **calculated\_result(result)**

This function prints the calculated result to the console in a formatted message.

1. **main()**

The main function serves as the entry point for the program.

It calls data\_required to collect user input, checks if the provided operation is valid using valid\_operation, and then calculates and displays the result using perform\_operation and calculated\_result.