Simple Python Calculator - Summary Report-1

Purpose:

A basic calculator program that performs simple arithmetic operations: addition, subtraction, multiplication, and division based on user input.
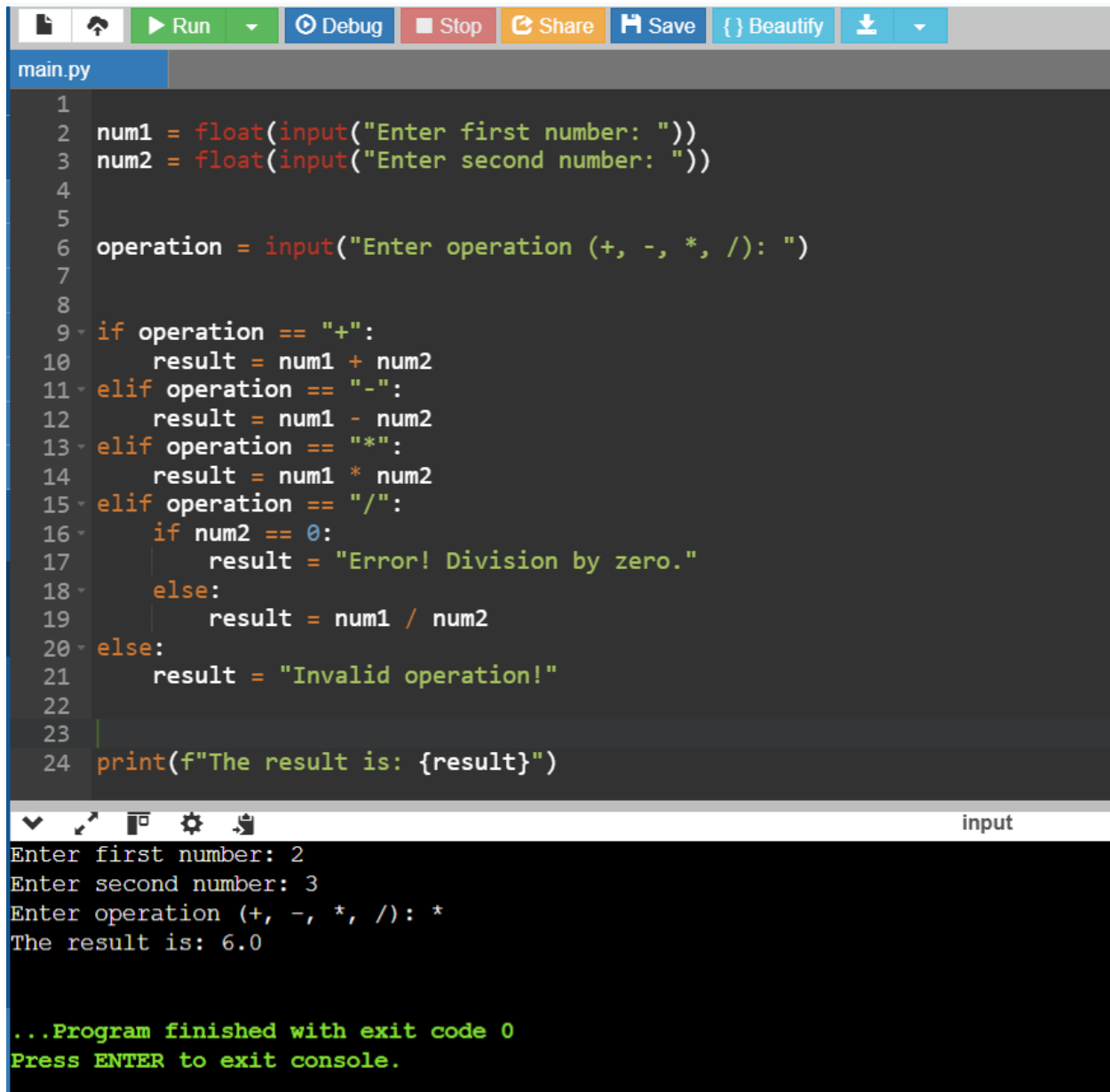
Code Structure:

1. **Input Handling**: Takes two numbers and an arithmetic operation from the user.

2. **Conditional Statements**: Performs the chosen operation using if-elif-else statements.

3. **Output**: Displays the result of the operation or an error message if the operation is invalid or division by zero occurs.

Key Features:

- **Basic Operations**: Addition, subtraction, multiplication, and division.

- **Error Handling**: Catches invalid operations and division by zero.

- **Simple Input/Output**: Prompts for user input and outputs the result.

Code:

```python
num1 = float(input("Enter first number: "))
num2 = float(input("Enter second number: "))


operation = input("Enter operation (+, -, *, /): ")


if operation == "+":
    result = num1 + num2
elif operation == "-":
    result = num1 - num2
elif operation == "*":
    result = num1 * num2
elif operation == "/":
    if num2 == 0:
        result = "Error! Division by zero."
    else:
        result = num1 / num2
else:
    result = "Invalid operation!"


print(f"The result is: {result}")
```

```
Enter first number: 2
Enter second number: 3
Enter operation (+, -, *, /): *
The result is: 6.0


...Program finished with exit code 0
Press ENTER to exit console.
```

Conclusion:

This calculator handles basic arithmetic with clear inputs and outputs. It can be easily expanded with more features, such as additional operations or improved error handling.