

Calculator

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In [3]: def addition(a, b):  
        return a + b
```

```
In [5]: def subtraction(a, b):  
        return a - b
```

```
In [7]: def multiplication(a, b):  
        return a * b
```

```
In [9]: def division(a, b):  
        if b == 0:  
            return "Error! Division by zero is not allowed."  
        return a / b
```

```
In [40]: def calculator():  
        print("Welcome to the Calculator!")  
  
        while True:  
  
            print("\nPlease select an operation:")  
            print("1. Addition")  
            print("2. Subtraction")  
            print("3. Multiplication")  
            print("4. Division")  
            print("5. Exit")  
  
            option = input("Enter your option (1/2/3/4/5): ")  
  
            if option == '5':  
                print("Goodbye!")  
                break  
  
            a1 = input("Enter the first number: ")  
            b1 = input("Enter the second number: ")  
            a = float(a1)  
            b = float(b1)  
  
            if option == '1':  
                print(f"The result of addition is: {addition(a, b)}")  
            elif option == '2':  
                print(f"The result of subtraction is: {subtraction(a, b)}")  
            elif option == '3':  
                print(f"The result of multiplication is: {multiplication(a, b)}")  
            elif option == '4':  
                print(f"The result of division is: {division(a, b)}")  
  
if __name__ == "__main__":  
    calculator()
```

Welcome to the Calculator!

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

The result of addition is: 101.0

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

The result of subtraction is: 24.0

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

The result of subtraction is: -20.0

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

The result of multiplication is: 2052.0

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

The result of division is: 13.0

Please select an operation:

1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Exit

Goodbye!