```
def add(x, y):
    return x + y
# Function to perform subtraction
def subtract(x, y):
   return x - y
# Function to perform multiplication
def multiply(x, y):
   return x * y
# Function to perform division
def divide(x, y):
   if y == 0:
       return "Error: Cannot divide by zero"
    else:
       return x / y
# Function to display welcome message
def display_welcome():
   print("Welcome to Simple Calculator")
# Function to display farewell message
def display farewell():
    print("Thank you for using Simple Calculator. Goodbye!")
# Function to handle user input and perform calculations
def calculator():
    while True:
       print("\nSelect operation:")
       print("1. Addition")
       print("2. Subtraction")
       print("3. Multiplication")
       print("4. Division")
       print("5. Exit")
       choice = input("Enter choice (1/2/3/4/5): ")
        if choice == '5':
            display_farewell()
            hreak
       if choice in ('1', '2', '3', '4'):
            num1 = float(input("Enter first number: "))
            num2 = float(input("Enter second number: "))
            if choice == '1':
               print("Result:", add(num1, num2))
            elif choice == '2':
               print("Result:", subtract(num1, num2))
            elif choice == '3':
               print("Result:", multiply(num1, num2))
            elif choice == '4':
                result = divide(num1, num2)
                if isinstance(result, str):
                    print(result)
                   print("Result:", result)
       else:
            print("Invalid input. Please enter a valid number.")
# Main function to start the program
def main():
   display_welcome()
   calculator()
if __name__ == "__main__":
    main()
→ Welcome to Simple Calculator
    Select operation:
     1. Addition
     2. Subtraction
     3. Multiplication
     4. Division
     Enter choice (1/2/3/4/5): 1
     Enter first number: 23
    Enter second number: 15
```

Result: 38.0

## Select operation:

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

Enter choice (1/2/3/4/5): 3 Enter first number: 1 Enter second number: 3

Result: 3.0

## ${\tt Select\ operation:}$

- Addition
   Subtraction
- 3. Multiplication
- 4. Division
- 5. Exit

Enter choice (1/2/3/4/5): 4 Enter first number: 20 Enter second number: 5

Result: 4.0

## Select operation: 1. Addition

- 2. Subtraction
- 3. Multiplication
- 4. Division
- 5. Exit

Enter choice (1/2/3/4/5): 5

Thank you for using Simple Calculator. Goodbye!