Here's a simple Python calculator program that can perform basic arithmetic operations such as addition, subtraction, multiplication, and division. The program allows users to input two numbers and select an operation to perform.

```
def calculator():
 while True:
   print("\nSimple Python Calculator")
   print("1. Addition (+)")
   print("2. Subtraction (-)")
   print("3. Multiplication (*)")
   print("4. Division (/)")
   print("5. Exit")
   choice = input("Enter your choice (1-5): ")
   if choice == '5':
      print("Exiting the calculator. Goodbye!")
      break
   if choice in ['1', '2', '3', '4']:
```

```
num1 = float(input("Enter first number: "))
num2 = float(input("Enter second number: "))
if choice == '1':
  result = num1 + num2
  print(f"Result: {num1} + {num2} = {result}")
elif choice == '2':
  result = num1 - num2
  print(f"Result: {num1} - {num2} = {result}")
elif choice == '3':
  result = num1 * num2
  print(f"Result: {num1} * {num2} = {result}")
elif choice == '4':
  if num2 != 0:
    result = num1 / num2
```

```
print(f"Result: {num1} / {num2} = {result}")

else:
    print("Error! Division by zero is not allowed.")

else:
    print("Invalid input! Please enter a number between 1 and 5.")

calculator()
```