**8.Write a Python function that takes two numbers and an operator (as a string) and performs the corresponding arithmetic operation (addition, subtraction, multiplication, or division).**

def arithmetic\_operation(num1, num2, operator):

if operator == '+':

return num1 + num2

elif operator == '-':

return num1 - num2

elif operator == '\*':

return num1 \* num2

elif operator == '/':

if num2 == 0:

return "Error: Division by zero is not allowed."

return num1 / num2

else:

return "Error: Invalid operator. Please use one of the following: +, -, \*, /."

# Taking user input

num1 = float(input("Enter the first number: "))

num2 = float(input("Enter the second number: "))

operator = input("Enter the operator (+, -, \*, /): ")

# Perform arithmetic operation and print result

result = arithmetic\_operation(num1, num2, operator)

print(f"Result of {num1} {operator} {num2} = {result}")

**OUTPUT:**

