PROGRAMMING ASSESSMENT

1. 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 calculate(num1, num2, operator):

"""Perform arithmetic operations based on the given 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"

return num1 / num2

else:

return "Error: Invalid operator"

# User input

if \_\_name\_\_ == "\_\_main\_\_":

try:

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

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

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

result = calculate(num1, num2, operator)

print(f"Result: {result}")

except ValueError:

print("Error: Please enter valid numbers.")

