**TASK – 2**

**Calculator**

Design a simple calculator with basic arithmetic operations. Prompt the user to input two numbers and an operation choice.

Perform the calculation and display the result.

**Code:-**

def calculator():

# Prompt user for the first number

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

# Prompt user for the second number

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

# Prompt user for the operation choice

print("Choose the operation:")

print("1. Addition (+)")

print("2. Subtraction (-)")

print("3. Multiplication (\*)")

print("4. Division (/)")

operation = input("Enter the number corresponding to the operation (1/2/3/4): ")

# Perform the operation and display the result

if operation == '1':

result = num1 + num2

print(f"The result of {num1} + {num2} is: {result}")

elif operation == '2':

result = num1 - num2

print(f"The result of {num1} - {num2} is: {result}")

elif operation == '3':

result = num1 \* num2

print(f"The result of {num1} \* {num2} is: {result}")

elif operation == '4':

if num2 != 0:

result = num1 / num2

print(f"The result of {num1} / {num2} is: {result}")

else:

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

else:

print("Invalid operation choice.")

# Run the calculator

calculator()

**Explaination:-**

 **Input the numbers**: We use float(input()) to ensure the numbers can handle decimal values.

 **Operation choice**: The user is prompted to choose an operation by entering a number between 1 and 4.

 **Perform calculation**: Based on the user's choice, the corresponding arithmetic operation is performed.

 **Division by zero**: There's a check to handle division by zero, which would otherwise cause an error.