Experiment No.1(4):

Exploring Basic Arithmetic Operations in Python*: Write a Python program to explore basic arithmetic operations. The program should prompt the user to enter two numbers and then perform addition, subtraction, multiplication, division, and modulus operations on those numbers. The results of each operation should be displayed to the user.

Program:

```
def add(a, b):
    c = a + b
    return c

def sub(a, b):
    c = a - b
    return c

def mul(a, b):
    c = a * b
    return c

def div(a, b):
    c = a / b
    return c

def mod(a, b):
    c = a % b
    return c

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = add(a, b)
print("Addition:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = sub(a, b)
print("Subtraction:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = mul(a, b)
print("Multiplication:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = div(a, b)
print("Division:", z)
```

```
a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = mod(a, b)
print("Mod:", z)
```

#program image

```
def add(a, b):
    c = a + b
    return c

def sub(a, b):
    c = a - b
    return c

def mul(a, b):
    c = a * b
    return c

def div(a, b):
    if b == 0:
        return "Error: Division by zero"
    c = a / b
    return c

def mod(a, b):
    if b == 0:
        return "Error: Modulus by zero"
    c = a % b
    return c

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = add(a, b)
print("Addition:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = sub(a, b)
print("Subtraction:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = mul(a, b)
print("Multiplication:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = div(a, b)
print("Division:", z)

a = int(input("Enter No1: "))
b = int(input("Enter No2: "))
z = mod(a, b)
print("Mod:", z)
```

#Output:
#output will vary with input numbersnumbers

Enter No1: 1
Enter No2: 2
Addition: 3
Enter No1: 56
Enter No2: 46
Subtraction: 10
Enter No1: 87
Enter No2: 65
Multiplication: 5655
Enter No1: 98
Enter No2: 35
Division: 2.8
Enter No1: 84
Enter No2: 97
Mod: 84