**Task 1: Flowcharts, Data Types, Operations**

**Objective: Understand basic Python concepts and perform arithmetic operations.**

INSTRUCTIONS:

1. Create a flowchart illustrating a simple process (e.g., calculating the area of a Cricle).
2. Define different data types (integers, floats, strings) and perform basic arithmetic operations (+, -, \*, /).

Example Output: Image of the flowchart and Python code demonstrating arithmetic operations.

Deadline: This week

1. **Create a flowchart illustrating a simple process (e.g., calculating the area of a circle).**

**Solution:**

Display:

Area

Calculate:

Area =3.14\*Radius\*Radius

Input: Radius

Fig. Flowchart to print Area of Circle

1. **Define different data types (integers, floats, strings) and perform basic arithmetic operations (+, -, \*, /).**

**Solution:**

*# Define integers*

num1 = 10

num2 = 5

*# Define floats*

float1 = 10.5

float2 = 5.5

*# Define strings*

string1 = "Hello"

string2 = "World"

*# Define booleans*

bool1 = True

bool2 = False

*# Define lists*

list1 = [1, 2, 3, 4, 5]

list2 = ["apple", "banana", "cherry"]

*# Define tuples*

tuple1 = (1, 2, 3, 4, 5)

tuple2 = ("apple", "banana", "cherry")

*# Define sets*

set1 = {1, 2, 3, 4, 5}

set2 = {"apple", "banana", "cherry"}

*# Define dictionaries*

dict1 = {"name": "John", "age": 36}

dict2 = {"apple": 2, "banana": 3, "cherry": 5}

*# Print the data types*

print(type(num1))

print(type(float1))

print(type(string1))

print(type(bool1))

print(type(list1))

print(type(tuple1))

print(type(set1))

print(type(dict1))

*# Perform basic arithemetic operations*

*# Addition*

print(num1 + num2)

*# Subtraction*

print(num1 - num2)

*# Multiplication*

print(num1 \* num2)

*# Division*

print(num1 / num2)

*# Modulus*

print(num1 % num2)

*# Exponentiation*

print(num1 \*\* num2)

*# Floor division*

print(num1 // num2)

*# Comparison operators*

*# Equal to*

print(num1 == num2)

*# Not equal to*

print(num1 != num2)

*# Greater than*

print(num1 > num2)

*# Less than*

print(num1 < num2)