TASK-2

PYTHON DEVELOPER

**Objective**: Get hands-on experience by writing simple Python scripts.

**Topics to Cover**:

* **Arithmetic Operations**:
  + Addition, subtraction, multiplication, division
  + Modulus, exponentiation, and floor division

a = 10

b = 3

print(a + b) # Addition

print(a - b) # Subtraction

print(a \* b) # Multiplication

print(a / b) # Division

print(a % b) # Modulus

print(a \*\* b) # Exponentiation

print(a // b) # Floor Division

* **String Manipulation**:
  + Concatenation, slicing, formatting

s1 = "Hello"

s2 = "World"

print(s1 + " " + s2) # Concatenation

print(s1[1:4]) # Slicing

print(f"{s1} {s2}!") # Formatting

**Conditional Statements**:

* If, elif, else

**Conditional Statements**:

* If, elif, else

x = 10

if x > 0:

print("Positive")

elif x == 0:

print("Zero")

else:

print("Negative")

### Gain Familiarity with Common Data Structures

**Objective**: Understand how to use lists, dictionaries, and tuples in Python.

**Topics to Cover**:

my\_list = [1, 2, 3, 4, 5]

print(my\_list[0]) # Indexing

my\_list.append(6) # Appending

for item in my\_list:

print(item) # Iterating

my\_dict = {"name": "Alice", "age": 25}

print(my\_dict["name"]) # Accessing value

my\_dict["city"] = "New York" # Adding key-value pair

del my\_dict["age"] # Removing key-value pair

TUPLES

my\_tuple = (1, 2, 3)

print(my\_tuple[1]) # Accessing element

# my\_tuple[0] = 10 # This will raise an error because tuples are immutable