Python Essentials - Assignments

Variables & Data Types

- 1. Write a program to take input of your name, age, and height. Print them with their data types.
- 2. Convert a float number to an integer and a string to float. Print results and types.
- 3. Swap two variables using a temporary variable and without using a third variable.

Conditional Statements

- 1. Write a program to check whether a number is positive, negative, or zero.
- 2. Write a program that takes a year and checks if it's a leap year.
- 3. Build a simple calculator using if-else to perform +, -, *, / based on user input.

Loops

- 1. Write a program to print all even numbers between 1 and 50 using a loop.
- 2. Display the factorial of a number entered by the user.
- 3. Create a program that finds the sum of digits of a number using a while loop.

Functions

- 1. Write a function to check whether a number is prime or not.
- 2. Create a function that returns the square and cube of a number.
- 3. Write a function that takes a string and returns it in reverse.

String Operations

- 1. Write a program that takes a string and counts the number of vowels in it.
- 2. Create a program to check if a string is a palindrome.
- 3. Accept a full name and format it as: 'Last, First'.