Python Development – Day 3 (24th Sep 2025)

# 1. Variables

A variable is like a memory container that stores a value (number, text, decimal, or character).

**Rules for variables:**

- Cannot start with a number.

- Cannot have spaces between names.

- Must be unique (no duplicate variable names).

Example:

your\_name = "Faizan"

Valid: hello\_world, name1

Invalid: 1name, first name

# 2. Print Function

print() is a built-in function used to display output.

Examples:

print('Hello') → Output: Hello

print("Python") → Output: Python

# 3. Data Types

Numbers → Integer (10, 100, 4000)

Text → String ('Hello World')

Character → Char ('a', 'b', 'c')

Decimal → Float (5.5, 7.1)

# 4. Arithmetic Operators

+ Addition

- Subtraction

\* Multiplication

/ Division

% Modulus (remainder)

& Logical/bitwise use in advanced cases

Operators are used with integers, floats, and doubles (not strings or chars).

# 5. Separator in Print

Multiple values can be separated using a comma in the print function.

Example:

print('Hello', 'World', 123)

# 6. Indentation

Indentation is the rule of spacing in Python.

Python uses indentation to define code blocks.

Wrong indentation will cause an error.

# 7. Comments

Comments are non-executable notes in code, used for explanation.

Single-line comments start with #

Example:

# This is a comment

# 8. New Line Character

\n is used to move output to the next line.

Example:

print("Hello\nWorld") → Output:

Hello

World

# 9. Example Program – Marksheet

You have to create a marksheet program.

Subjects: Math=50, CS=40, Urdu=70, English=60, PK=80

Total Marks = 500

Obtained Marks = sum of all subjects (e.g., 340)

Code Example:

Math = 50

CS = 40

Urdu = 70

English = 60

Pk = 80

Total = 500

Obtained = Math + CS + Urdu + English + Pk

print(Obtained)

print(Obtained/Total)