Week 1: Introduction to Python Programming

1. Variables – Containers to store values, e.g., x = 5, name = "Avi".

2. Data Types – Types of values: int, float, str, bool, list, tuple, dict.

3. Operators – Perform calculations or comparisons:

   - Arithmetic: +, -, *, /, %

   - Comparison: ==, !=, >, <

   - Logical: and, or, not

4. Input/Output –

   - input() to take user input

   - print() to display output

5. Conditional Statements – if, elif, else used for decision-making.

6. Loops – Repeat actions:

   - for loop iterates over a sequence

   - while loop repeats until a condition becomes False

7. Hands-On Applications – Developed Python programs:

   - Temperature Converter

   - Simple Calculator

   - Average Temperature Calculator

Skills Applied: Variables, loops, conditions, data input/output, arithmetic operations, and basic data processing.