

Python Programming Basics

1. Introduction to Python

Python is a high-level, interpreted programming language known for its simplicity and readability.

2. Basic Structure of a Python Program

A simple Python program:

```
print("Hello, World!")
```

3. Python Data Types

- int
- float
- str
- bool
- list, tuple, set, dict

4. Variables

Variables store values without requiring type declarations.

5. Input and Output

- input() for taking user input
- print() for output

6. Control Statements

- if, elif, else
- loops: for, while

7. Functions

Functions are defined using 'def'.

8. Lists

Lists store multiple items and are mutable.

9. Dictionaries

Dictionaries store key-value pairs.

10. Object-Oriented Programming

Python supports classes and objects.