

## **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.