

# Python Training Program

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## About the Course

Python is a modern programming popular language for application and system development.

## Topics Covered

### Day 1

- Getting to know - Student & Trainer Introductions
- Introduction to Python
- Get Started – Hello World program
- IDLE for Compiling & Running program
- Basic Data Types and Assignments
- Identifiers and Indentation
- Data Operations
- Sequence Types, Tuples, Lists
- Operators and Expressions
- Dictionary and Sets
- Control Structure
- Functions
- Variable Scope – Global, local and Non Local
- OOPS Concepts
- Classes and objects
- Instance and Instantiation
- User Defined Classes
- Member variables and Methods
- constructors and Destructors



### Day 2

- Super class
- Default Attributes and Methods
- Inheritance and Override methods
- Polymorphism
- Function and Operator Overloading
- Abstract Classes
- Multiple Inheritance
- Pseudo Private Attributes and Functions
- New `__get attribute__`
- Encapsulation and Intercepting Attribute Access
- Class and Static Method
- Properties and Descriptors
- Lambda Functions
- Comprehensions - List, set and dictionary
- Extending Built-in Types
- Custom Collection classes
- Iterators
- Decorators
- Generators
- Streams
- Context Manager
- Functional Tools