

SYLLABUS

COVERAGE

- Introduction to Python
- Python Interpreter
- Basics of Python
- Control Flow
- Functions
- Numeric types
- Strings
- List
- Tuple
- Set
- Dictionary
- Files
- Exception Handling
- OOP and Classes

SYLLABUS IN DETAILS

Introduction to Python

- History of Python
- Why learn Python
- How is Python different?
- Getting & Installing Python
- Data types
- Static Typing vs Dynamic Typing
- Input and output
- Indentation
- Operators

Python Interpreter

- Using the interpreter
- Integrated Development Environments(IDE)
- How to run Python programs?

Basics of Python

- Variable
- Keywords
- Statements & Comments

Control Flow

- If statement
- If...else
- If...elif...else
- Nested if...else
- While loop
- For loop
- Nested loop
- Pass statement
- Break and continue statements

Functions

- Functions Basics
- Defining function
- Function call
- Function parameters
- Local and global variables
- Default Argument
- Recursion
- Anonymous functions
- Modules and package

Numeric types

- Numeric type basics
- Numbers
- Numeric display formats
- Comparisons
- Division
- Complex numbers
- Hexadecimal, Octal and Binary Notation
- Numeric Functions

Strings

- String literals
- Indexing and slicing
- String methods
- String formatting expressions

List

- What is a list
- Adding list elements
- Mutability
- Methods

Tuple

- What is Tuple
- Adding Tuple elements
- Immutability
- List vs Tuple
- Methods

Set

- What is a set
- Creating a set
- Set operations

Dictionary

- Making a Dictionary
- Basic operations
- Dictionary details

Files

- File operations
- File and streams
- Creating a file
- Reading from file
- Writing to file
- Appending to file
- Closing file

Exception Handling

- What is Exception
- Catching Exception
- Default Exception handler
- Raising Exceptions
- User defined Exception

OOP and Classes

- Object Oriented Programming
- OOP concepts
- Class Coding basics
- Classes vs Modules
- Inheritance
- Namespace
- Operator Overloading
- Advance Class Topics