Python

OVERVIEW

- History of Python
- Python Features
- Environment Setup
- Getting Python installing Python
- Setting up PATH
- Setting path at Windows
- Python Environment Variables
- Running Python

BASIC SYNTAX

- Python Program
- Python Identifiers
- Python Keywords
- Lines and Indentation
- Multi-Line Statements
- Quotation in Python
- Python Comments in Python
- Multiple Statements on a Single Line
- Command Line Arguments
- Accessing Command-Line Arguments
- Parsing Command-Line Arguments

VARIABLE TYPES

- Assigning Values to Variables
- Multiple Assignment
- Standard Data Types
- Python Numbers
- Python Strings
- Python Lists
- Data Type Conversion

BASIC OPERATORS

- Types of Operators
- Arithmetic Operators
- Comparison Operators
- Logical Operators
- DECISION MAKING
- If…else Statement
- The elif Statement
- Single Statement Suites
- LOOPS While Loop
- The Infinite Loop
- Using else Statement with Loops
- Single Statement Suites
- For Loop
- Break Statement
- Continue Statement

FUNCTIONS

- Defining a Function
- Calling a Function
- Passing by Reference Vs Passing by Value
- Global vs. Local variables
- Locating Modules
- Packages in Python

FILES I/O

- Printing to the Screen
- Reading Keyboard Input
- The raw_input Function
- The input Function
- Opening and Closing Files
- The open Function
- The file Object Attributes
- The close() Method
- Reading and Writing Files
- The write() Method
- The read() Method

EXCEPTIONS

- What is Exception
- Handling an Exception
- The except Clause with No Exceptions
- The except Clause with Multiple Exceptions
- The try-finally Clause
- Argument of an Exception
- Raising an Exception
- User-Defined Exceptions
- CLASSES AND OBJECTS
- Overview of OOP Terminology
- Creating Classes
- Creating Instance
- Objects
- Built-In Class Attributes
- Class Inheritance
- Overriding Methods
- Base Overloading Methods