Python Course Content

Python Introduction

- History
- Features
- Setting up path
- Working with Python

Python Basic Syntax

- Keywords
- Identifiers
- Variable
- Data Types
- Statements
- Comments

Python Basic Built-in Functions

- Input Functions
- Out Put Functions
- Type & Id Functions
- Data Type Conversion Functions
- Number System Conversion Functions

Python Operators

- Arithmetic Operators
- Relational Operators
- Logical Operators
- Bitwise Operators
- Assignment Operators
- Special Operators

Python Conditional Statements

- ➢ Simple If
- ➢ If- else
- ➢ Else – if ladder
- ➢ Nested if-else

Python Looping Statements

- ➢ For
- ➢ While
- ➢ Nested loops

Python Control Statements

- ➢ break
- ➢ continue
- ➢ pass

Python String Datatype

- ➢ Accessing Strings
- ➢ Basic Operations
- ➢ String slices
- ➢ Function and Methods

Python Lists Datatype

- ➢ Introduction
- ➢ Accessing list
- ➢ Operations
- ➢ Working with lists
- ➢ Function and Methods

Python Tuple Datatype

- Introduction
- Accessing tuples
- Operations
- Working
- Functions and Methods

Python Set Datatype

- Introduction
- Accessing values in sets
- Working with sets
- Properties
- Functions

Python Dictionary Datatype

- Introduction
- Accessing values in dictionaries
- Working with dictionaries
- Properties
- Functions

Python Functions

- Defining a function
- Calling a function
- Types of functions
- Function Arguments
- Recursive Functions
- Anonymous functions
- Global and local variables

Python Modules and Packages

- Importing module
- Math module
- Random module
- Packages
- Composition

Python Files

- Definition Of File
- Types of Files
- Opening and closing file
- Reading and writing files
- Functions

Python Exception Handling

- Exception
- Exception Handling
- Except clause
- Try ? finally clause
- User Defined Exceptions

Python OOPs concept

- Class and object
- Attributes
- Inheritance
- Polymorphism
- Overloading
- Overriding
- Data hiding

Python Regular expressions

- Match function
- Search function
- Matching VS Searching
- Modifiers
- Patterns

Python Multithreading

- Thread
- Starting a thread
- Threading module
- Synchronizing threads
- Multithreaded Priority Queue

Python GUI Programming

- Introduction
- Tkinter programming
- Tkinter widgets

Python Networking

- Socket
- Socket Module
- Methods
- TCP Client and server implementation
- UDP Client and server implementation
- SCTP   Client and server implementation for TCP
- SCTP   Client and server implementation for UDP
- Byte Array
- Bit Array

Python XML Parser

- What is XML?
- Difference between XML and HTML and XML, JSON, Gson
- How to Parse XML and Create XML Node
- Python vs JAVA
- XML and HTML

Python-Data Base Communication

- What is Database? Types of Databases?
- What is DBMS?, RDBMS?
- What is Big Data? Types of data?
- Oracle
- MySQL
- SQL server
- DB2
- Postgre SQL
- Executing the Queries
- Bind Variables
- Installing of Oracle Python Modules
- Executing DML Operations..!!