**Python Course Content**

**Basic Introduction**

* Software
* Types Of Software
* Programming Languages
* Types Of Programming Languages
* Translators
* Types Of Translators

**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-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..!!