

BASIC PYTHON

- Why What & How to Run Python
 - Why to Choose Python
 - What is Python
 - How to Run Python(Steps)
 - Windows(7/10)
 - Linux(Ubuntu/Redhat)
- Tokens in Python
 - Basics(Variables, Constants)
 - Operators
 - Unary
 - Binary
 - Ternary
 - Data Types
 - Primary Data Types
 - Secondary Data Types
 - Conversions(Implicit & Explicit)
- Statements
 - Input & Output Statements
 - Conditional Statements
 - Simple if Statement
 - If-else statement
 - Else-if Ladder
 - Nested if statement
 - Loop Statements
 - While Loop
 - For in Loop
- Collections
 - List
 - Tuples
 - Dictionary
 - Set
- List Comprehension
 - Simple List Comprehension

- Conditional using Tuple
 - Conditional using Dictionary
- Functions
 - Why we Need Function
 - Categories of Functions
 - Predefine
 - User-define
 - Parts of Functions
 - Arguments, Return Value
 - Definition of Function
 - Function Calling
- Lambda
 - Why we need & Benefits
 - With or Without Lambda
 - Map, Reduce & Filter
- File Handling
 - Path & Directory Settings
 - Absolute
 - Relative
 - File Modes(r,w,a,etc)
 - Open & Close file
 - With as Keyword
 - Reading File using Python
 - Read Line By Line readline() function
 - Read Word
 - Read Character(offset)
 - Writing Text File using Python
 - Write Mode
 - Append Mode
- Exception Handling
 - Types of Errors
 - Try and Catch Block
 - Predefine Exceptions
- Module & Package Manager
 - PIP3.X Installation & Configuration
 - Package Management(install, remove, copying & usage)

- Environment Management
- Core OOP
 - Methodologies in Software Development
 - OOP Characteristics
 - Class and Object
 - Constructors & Destructor
 - Inheritance & its Types
 - Polymorphism(Function Overloading, Overriding & Operator Overloading)
- Package Study
 - OS
 - Data & Time
 - JSon
 - CSV
 - Beautiful Soap
 - Request
 - matplotlib