Core Python Programing

01 - PYTHON BASICS

- Who use python?
- History of python language
- Components of python
- Steps in python program execution
- Installation guidelines
- Various ways to run python programs?
- Python Language syntax
- Simple input/output operations
- Operators in Python

02 – NUMBER DATA TYPE FUNDAMENTALS

- Numbers as data-type
- Useful numeric modules
- Numeric literals and constructors

03 - STRING DATA TYPE FUNDAMENTALS

- String as data-type
- Indexing and slicing string
- String methods
- String literals and operations

04 - LISTS FUNDAMENTALS

- Indexing and slicing list
- Polymorphism & Immutability
- List methods
- List literals and operations

05 – DICTIONARIES FUNDAMENTALS

- Dictionary methods

- Dictionary literals and operations

06 – TUPLES & SETS FUNDAMENTALS

- Why tuples?
- Tuples literals and operations

07 – PYTHON STATEMENTS & FUNCTIONS

- General hierarchy in python
- In-depth study of python statements

08 –LOOPS IN PYTHON

- What are while loops?
- Count controlled while loop
- Event controlled while loop
- What are for loops?
- How to skip parts of the loop?

09 – ITERATIONS AND COMPREHENSIONS

- What is iteration and iterator?
- List comprehension and its benefits
- Introduction to generators
- How to create a generator?

10 – FUNCTION BASICS & LAMBDA FUNCTION

- Why use functions?
- Writing python functions
- What is Anonymous function?
- Why use lambda (Anonymous function)?
- Map and Lambda
- Filter and Lambda
- Reduce and Lambda