

# PYTHON PROGRAMMING

DURATION : 40 HRS

## PYTHON

- ✓ **Introduction**
  - Other programming language vs Python
  - History
  - Features
  - Installing python

## CHAPTER 1

- ✓ **Python Language Fundamentals**
  - Comments
  - Variables
  - Operators

## CHAPTER 2

- ✓ **Conditional Statements**
  - If statement
  - If else statement
  - If elif statement
  - Nested If

## CHAPTER 3

- ✓ **Looping Statements**
  - While loop
  - For loop
  - Nested loops
  - Pass, break and continue keywords

## CHAPTER 4

- ✓ **Standard Data Types**
  - Int, float, complex, bool,
  - List, tuple, range Dict, set

## CHAPTER 5

- ✓ **String Handling**
  - String representations
  - Methods
  - Indexing
  - Slicing String formatting

## CHAPTER 6

- ✓ **List**
  - Creating and accessing lists
  - Indexing and slicing lists
  - List methods
  - List comprehension

## CHAPTER 7

- ✓ **Tuple**
  - Creating tuple
  - Accessing tuple Remove tuple Immutability of tuple
  - Method

## CHAPTER 8

- ✓ **Set**
  - Creating set
  - Accessing
  - Union
  - Intersection
  - methods

## CHAPTER 9

- ✓ **Dictionary**
  - Creating a dictionary
  - Dictionary methods
  - Accessing values from dictionary
  - Updating dictionary

## CHAPTER 10

- ✓ **Functions**
  - Defining a function
  - Calling a function
  - Types of functions
  - Lambda function

## CHAPTER 11

### ✓ File I/O

- Introduction to file handling
- Modes open close read write

## CHAPTER 12

### ✓ Object Oriented Programming

- Defining a class & object
- Creation Object attributes
- Inheritance

## CHAPTER 13

### ✓ Exception Handling

- Try
- Except
- Finally

## CHAPTER 14

### ✓ Database Connectivity

- Database Concepts
- Relational Database (RDBMS) Concept
- Sql query(Basic)