

# CORE PYTHON

- Introduction
- History ,Features ,Setting up path ,Working with Python
- Basic Syntax, Variable and Data Types , Operator

- Conditional Statements
- If, If- else ,Nested if-else

- Looping
- For , While , Nested loops
- Control Statements
- Break ,Continue ,Pass

- String Manipulation
- Accessing Strings ,Basic Operations,
- String slices,Function and Methods

- Lists
- Introduction,Accessing list, Operations ,
- Working with lists,Function and Methods

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

- Dictionaries
- Introduction ,Accessing values in dictionaries ,
- Working with dictionaries,Properties

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

- **Modules**
- Importing module ,Math module ,
- Random module ,Packages
- Composition Input-Output Printing on screen ,
- Reading data from keyboard
- Opening and closing file
- Reading and writing files

- **Functions**

- **Exception Handling**
- Exception ,Exception Handling
- Except clause ,Try ? finally clause ,User Defined

## **ADV PYTHON**

- **OOPs concept**
- Class and object ,Attributes
- Inheritance ,Overloading
- Overriding ,Data hiding

- **Regular expressions**
- Match function ,Search function
- Matching VS Searching
- Modifiers ,Patterns

- CGI
- Introduction ,Architecture
- CGI environment variable
- GET and POST methods
- Cookies ,File upload

- Database
- Introduction ,Connections
- Executing queries
- Transactions ,Handling error

- Networking
- Socket ,Socket Module ,Methods ,Client and server
- Internet modules

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

- GUI Programming
- Introduction
- Tkinter programming
- Tkinter widgets
- GUI with MongoDB Database
- Add, Modify, Display, Search , Update DB
- Sending email

- Project