



PYTHON COURSE CONTENT

Module 1: Introduction To Python

- Installation and Working with Python
- Understanding Python variables
- Python basic Operators
- Understanding python blocks

Module 2: Python Data Types

- Declaring and using Numeric data types: int, float, complex
- Using string data type and string operations
- Defining list and list slicing
- Use of Tuple data type

Module 3: Python Program Flow Control

- Conditional blocks using if, else and elif
- Simple for loops in python
- For loop using ranges, string, list and dictionaries
- Use of while loops in python
- Loop manipulation using pass, continue, break and else

- Programming using Python conditional and loops block

Module 4: Python Functions, Modules And Packages

- Organizing python codes using functions
- Organizing python projects into modules
- Importing own module as well as external modules
- Understanding Packages
- Powerful Lambda function in python
- Programming using functions, modules and external packages

Module 5: Python String, List And Dictionary Manipulations

- Building blocks of python programs
- Understanding string in build methods
- List manipulation using in build methods
- Dictionary manipulation
- Programming using string, list and dictionary in build functions

Module 6: Python File Operation

- Reading config files in python
- Writing log files in python
- Understanding read functions, read (), readline() and readlines()
- Understanding write functions, write () and write lines()
- Manipulating file pointer using seek
- Programming using file operations

Module 7: Python Object Oriented Programming – Oops

- Concept of class, object and instances

- Constructor, class attributes and destructors
- Real time use of class in live projects
- Inheritance , overlapping and overloading operators
- Adding and retrieving dynamic attributes of classes
- Programming using OOPS support

Module 8: Python Regular Expression

- Powerful pattern matching and searching
- Power of pattern searching using regex in python
- Real time parsing of networking or system data using regex
- Password, email, URL validation using regular expression
- Pattern finding programs using regular expression

Module 9: Python Exception Handling

- Avoiding code break using exception handling
- Safe guarding file operation using exception handling
- Handling and helping developer with error code
- Programming using Exception handling

Module 10 : DATABASE CONNECTIVITY:

- What is database and its purpose?
- Types of databases
- What is a query?
- Working with oracle/My SQL databases.
- How to install My SQL-server and oracle
- How to know what modules to install
- Operations
- Creation of tables

- Insertion
- Data retrieval
- Updation
- Alterations
- Deletions

Module 11: Python Multithreading

- Understanding threads
- Forking threads
- Synchronizing the threads
- Programming using multithreading