

PYTHON COURSE CONTENT

1. Introduction

- Introduction to python
- Types of applications that can be developed
- Installation
- Interactive interpreter

2. Python Frameworks

- Different types of frameworks
- Tools that we use in developing the applications
- PyCharm, Anaconda, Jupyter

3. Basics of Python

- Data types
- Keywords
- Operators

4. Basic programming

- Indentation
- Programming using operators
- Strings and its methods
- Control flow statements and loops
- Functions and types of functions
- Anonymous functions
- Arrays
- HTML in python

5. Modules

- Built in modules
- Making own modules
- Packages

6. Data Structures

- Lists
- Tuples
- Sets
- Dictionaries
- Pickle
- Sequence

7. File Handling

- Creating and reading files
- File modes
- Built-in functions

8. Exception Handling

- Exception
- Exception Handling
- Try, except, else
- Raising exceptions

9. Object oriented concepts

- Object
- Class
- Init and other methods
- Encapsulation

- Inheritance and types
- Polymorphism
- Abstract class
- Duck typing
- Monkey patching

10. Database connectivity

- Different data sources that we can use
- Databases that we use
- Database connectivity programming
- CRUD operations example
- Using XML and JSON data formats
- No SQL databases SQLite, mongo, MySQL

11. GUI Programming using Python

- Different frameworks those can be used
- Different types of applications those can be developed
- Tkinter tool
- Labels, textboxes, menus, tabs