

### Python Training course Overview

- Get the best Python training in Bangalore. Apponix is proud to say that its is one of the top Python training provider in Bangalore, we provide best training experience and results to our valued students, All our trainers are very experienced IT professionals and love to share their practical knowledge with the students.
- Python Programming Training course is designed to suit all levels of students to provide in depth knowledge about python scripting. All classes will be conducted by IT Industry experts who will guide you through out the course to leverage Python scripting to make you get ready for your dream job.
- Training in Apponix technologies mainly focuses on the present scope of python and real time requirements which will introduce a new learning experience to the newbies. The pattern of the course structure meticulously designed for beginners and professionals who wanted to start or empower their skills on Python.
- Every section of module and the code test conducts on every python concept will boost your coding skill. Real time projects like scraping a website or automating a daily repetitive tasks with your knowledge helps you to get interest and learn more. On successful completion of the course, you will step out with 100% satisfaction and knowledge to achieve your goals.
- Python training course covers an up to date and most relevant topics which are required by most of the companies, our python instructor knows very well on topics & syllabus to be covered.

### Why you should learn Python Programming?

- Below are the few reasons to choose python:
- Python has very simple syntax which is easy to understand
- Millions of jobs opportunities for python developers.
- Python is the most preferred language for Artificial Intelligence, Robotics, Web Development and DevOps.
- Python is one of the most premier, flexible, and powerful open-source language that is easy to learn.
- Python is easy to use, and has powerful libraries for data manipulation and analysis.
- For more than a decade, Python has been used in scientific computing and highly quantitative domains such as finance, oil and gas, physics, and signal processing as of today.

## Python Training course objectives:

**Main objectives of the course are as follows:**

- Write python scripts, unit test code
- Programmatically download and analyze data
- Learn techniques to deal with different types of data i.e. ordinal, categorical, encoding
- Learn data visualization

**Course Duration : 40 Hours**

## Python Training Course Content

### SECTION I

- **Overview**
  - Why do we need Python?
  - Program structure
- **Environment Setup**
  - Python Installation
  - Execution Types
  - What is an interpreter?
  - Interpreters vs Compilers
  - Using the Python Interpreter
  - Interactive Mode
  - Running python files
  - Working with Python shell
  - Integrated Development Environments (IDES)
  - Interactive Mode Programming
  - Script Mode Programming
- **Basic Concepts**
  - Basic Operators
  - Types of Operator
  - Python Arithmetic Operators
  - Python Comparison Operators
  - Python Assignment Operators
  - Python Bitwise Operators
  - Python Logical Operators
  - Python Membership Operators (in, not in)
  - Python Identity Operators (is, is not)
  - Python Operators Precedence

- **Data Types**

- Variables
- Assigning Values to Variables
- Multiple Assignment
- Python Numbers
- Python Strings
- Accessing Values in Strings
- String Special Operators
- String Formatting Operator
- Triple Quotes
- Built-in String Operations
- Python Lists
- Accessing Values in Lists
- Updating Lists
- Delete List Elements
- Basic List Operations
- Indexing, Slicing, and Matrixes
- Built-in List Functions & Methods
- Python Tuples
- Accessing Values in Tuples
- Updating Tuples
- Delete Tuple Elements
- Basic Tuples Operations
- Indexing, Slicing, and Matrixes
- No Enclosing Delimiters
- Built-in Tuple Functions
- Python Dictionary
- Accessing Values in Dictionary
- Updating Dictionary
- Delete Dictionary Elements
- Properties of Dictionary Keys
- Built-in Dictionary Functions & Methods

- **Loops and Decision Making**

- if statements
- ..else statements
- nested if statements
- while loop
- for loop
- nested loops
- Loop Control Statements
- break statement
- continue statement
- pass statement

## SECTION II

- **Functions**

- Defining a Function
- Syntax
- Calling a Function
- Pass by reference vs value
- Function Arguments
- Required arguments
- Keyword arguments
- Default arguments
- Variable-length arguments
- The return Statement
- Scope of Variables
- Global vs. Local variables

- **Basic OOPs Concept**

- Creating class in Python
- Documented String
- Private Identifier
- Constructor
- Inheritance
- Polymorphism

- **Python Modules and Packages**

- Framework vs Packages
- Why are modules used?
- Creating modules
- The import Statement
- The from...import Statement
- The from...import \* Statement
- Locating Modules
- The PYTHONPATH Variable
- Namespaces and Scoping
- The dir( ) Function
- The globals() and locals() Functions
- The reload() Function
- Packages in Python

- **Decorator, Iterator and Generator**

- **Anonymous Function**

- Lambda
- Map
- Filter
- Reduce

## SECTION III

- **File Manipulation**

- Opening Text File
- Working with a File on Python
- The open function
- File modes
- The file object attributes
- close() method
- write() method
- read() method
- Files: Input
- Files: Output
- Reading files
- Renaming & deleting files
- Writing into a file
- remove() method

- **Python GUI**

- Basic Operations using Tkinter
- Buttons and Textbox
- Menu Bar
- Message Box and Radio Button
- Checkbox and Event Creating
- Creating Application in GUI

- **SQLite**
  - Overview of SQLite
  - Integrating Python with SQLite
  
- **Project Demonstration Tkinter**
  - Project Demonstration Tkinter
  
- **Other Concepts**
  - Errors and Exception Handling
  - Standard exceptions
  - Assertions in Python
  - The assert Statement
  - What is Exception?
  - Handling an exception
  - Syntax
  - The except Clause with No Exceptions
  - The except Clause with Multiple Exceptions
  - The try-finally Clause
  - Argument of an Exception
  - Example with Tkinter Application
  
- **Advanced Concept -- Overviews**
  - Basics of Pandas and Numpy
  - How to use Anaconda
  - Overview of Django