

# Python Syllabus

## 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

## 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 Exceptions

## OOPs concept

- ✓ Class and object
- ✓ Attributes
- ✓ Inheritance
- ✓ Overloading
- ✓ Overriding
- ✓ Data hiding

## Data Handling Using Pandas

- ✓ Basic Features of Pandas
- ✓ Python Library & Installation
- ✓ Data structure in Pandas
- ✓ Series
- ✓ DataFrame

## Regular expressions

- ✓ Match function
- ✓ Search function
- ✓ Matching VS Searching
- ✓ Modifiers
- ✓ Patterns

## Database

- ✓ Introduction to MySQL
- ✓ Connections
- ✓ Executing queries
- ✓ Transactions
- ✓ Handling error

## Data Visualization

- ✓ Introduction to charts
- ✓ Use of Matplotlib & Numpy Library
- ✓ Line chart
- ✓ Pie chart , Bar chart
- ✓ Scattered Chart & Histogram