# Python Programming

## **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

#### **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

# **Advance 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

# Sending email