

ZENUS INFOTECH INDIA PVT. LTD.

Curriculum of Advance Python

Course Duration: 8 weeks*

INTRODUCTION

Why do we need Python?

Program structure

Interactive Shell

Executable or script files.

User Interface or IDE

GETTING STARTED

History & need of Python

Application of Python

Advantages of Python

Disadvantages of Python

Installing Python

PYTHON FUNDAMENTALS

Working With Interactive Mode

Working With Script Mode

Python Character Set

Python Tokens-

Keywords, Identifiers, Literals,

Operators

Variables and Assignments

Input and Output Functions in Python

Conditional Statements & Loops

if...statement

if...else statement

elif...statement

The while...Loop

The for....Loop

Control Statements

continue statement

break statement

Functions

Using a Functions

Python Function Types

Structure of Python Modules

Importing Modules in Python

Programs

Invoking Python's Built In Functions

Working With Random Modules

STRING MANIPULATION

Introduction to Python String

Accessing Individual Elements

String Operators

String Slices

String Functions and Methods

LIST MANIPULATION

Introduction to Python List

Creating List

Accessing List

Joining List

Replicating List

List Slicing

TUPLES

Introduction to Tuples

Creating Tuples

Accessing Tuples

Joining Tuples

Replicating Tuples

Tuple Slicing

DICTIONARIES & SETS

Introduction

Accessing values in dictionaries

Working with dictionaries

Properties

Python Sets Examples

INPUT AND OUTPUT IN PYTHON

Reading and writing text files

writing Text Files

Modules & Packages

Modules

How to import a module...?

Command line arguments

Packages

Creating custom packages

Modules & Packages

Modules

How to import a module...?

Command line arguments

Packages

Creating custom packages

FILE OPERATIONS

Opening a file

Using Files

Other File tools

EXCEPTION HANDLING

Default Exception Handler

Catching Exceptions

Raise an exception

PYTHON OBJECT ORIENTED

Overview of OOP

Creating Classes and Objects

Accessing attributes

Built-In Class Attributes

Destroying Objects

Pillars of OOPS

Inheritance

Encapsulation

Polymorphism, Abstraction

Introduction to MySQL database

Overview

Create Database

Create Table

Drop Table

Insert query

Select query

Delete and Update query

WHERE, AND & OR Clause

GUI Programming with Tkinter

Introduction

Saying Hello with Labels

Buttons

Message Widget

Entry Widget

Dialogs

RadioButton and Checkboxes

Creating Menus

Events and Binds