

Advanced Python Syllabus

1.) Introduction

- ✓ History
- ✓ Features
- ✓ Setting up path
- ✓ Working with Python
- ✓ Basic Syntax
- ✓ Variable and Data Types
- ✓ Operator

2.) Conditional Statements

- ✓ If
- ✓ If- else
- ✓ Nested if-else
- ✓ Examples

3.) Looping

- ✓ For
- ✓ While
- ✓ Nested loops
- ✓ Examples

4.) Control Statements

- ✓ Break
- ✓ Continue
- ✓ Pass
- ✓ Examples

5.) String Manipulation

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- ✓ Accessing Strings
- ✓ Basic Operations
- ✓ String slices
- ✓ Function and Methods
- ✓ Examples

6.) Lists

- ✓ Introduction
- ✓ Accessing list
- ✓ Operations
- ✓ Working with lists
- ✓ Function and Methods

7.) Tuple

- ✓ Introduction
- ✓ Accessing tuples
- ✓ Operations
- ✓ Working
- ✓ Functions and Methods
- ✓ Examples

8.) Dictionaries

- ✓ Introduction
- ✓ Accessing values in dictionaries
- ✓ Working with dictionaries
- ✓ Properties
- ✓ Functions
- ✓ Examples

9.) Functions

- ✓ Defining a function

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- ✓ Calling a function
- ✓ Types of functions
- ✓ Function Arguments
- ✓ Anonymous functions
- ✓ Global and local variables
- ✓ Examples

10.) Lambda Operator

- ✓ Lambda function

11.) List Comprehension

- ✓ Introduction
- ✓ Generator Comprehension
- ✓ Set Comprehension

12.) Modules

- ✓ Importing module
- ✓ Math module
- ✓ Random module
- ✓ Packages
- ✓ Examples

13.) Input-Output

- ✓ Printing on screen
- ✓ Reading data from keyboard
- ✓ Opening and closing file
- ✓ Reading and writing files
- ✓ Functions
- ✓ Examples

14.) Exception Handling

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- ✓ Exception
- ✓ Exception Handling
- ✓ Except clause
- ✓ Try ??? finally clause
- ✓ User Defined Exceptions
- ✓ Examples

15.) Packages

- ✓ Predefined Packages
- ✓ User Defined packages

16.) File Handling

- ✓ Text Files

17.) OOPS

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

18.) Inheritance

- ✓ Single Inheritance
- ✓ Multilevel Inheritance
- ✓ Multiple Inheritance
- ✓ Hybrid Inheritance
- ✓ Hierarchal Inheritance

19.) Polymorphism

- ✓ Duck Type Philosophy
- ✓ Method Overloading
- ✓ Operator Overloading
- ✓ Constructor Overloading
- ✓ Method Overriding
- ✓ Constructor Overriding

20.) Database

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

21.) GUI Programming

- ✓ Introduction
- ✓ Tkinter Programming

24.) Flask Python Framework