

Python Syllabus

Core Python

INTRODUCTION TO PYTHON

- What is python
- Python use cases
- The birth of python
- Features of python
- Versions of python

THE PYTHON ENVIRONMENT

- Python installation
- Setting path for python
- Python command line shell, Editors and IDE's
- Running python program on windows

GETTING STARTED

- Keywords
- Datatypes
- Number System
- Mutable objects vs immutable objects
- Variables
- Naming conventions
- Print(), type() and id() functions
- input() function
- Type conversion functions
- Operators

FLOW CONTROL

Conditional Statements

- if,
- if-else,
- if-elif-else.

Looping Statements

- for loop,
- while loop.

Transfer Statements

- break,
- continue,
- pass.

STRING HANDLING

- All string operations

PYTHON COLLECTIONS

- List
- Tuple
- Set
- Frozen_set
- Dictionary

FUNCTIONS IN PYTHON

- Defining functions
- Arguments/parameters
- Lambda functions
- Filter(),map(),reduce() functions

MODULES AND PACKAGES

- What is module
- Module types
- Module creations and utilization
- What is package
- Package types
- Package creation and utilization
- Differences between python 2.x and 3.x

Advance Python

OOPS CONCEPTS

- Introduction to oops programming
- OOPS principles
- Defining classes
- Creating objects
- Class variables
- Instance variables
- Local variables
- Methods in oops
- Differences between functions and oops
- Constructors
- Destructors
- Inheritance
- Types of inheritance
- Polymorphism(overloading and overriding)
- Super() method
- Inner classes

EXCEPTION HANDLING

FILE HANDLING

PYTHON DATABASE CONNCETIVITY

- Sqlite3 database operations
- Mysql database operations

ADVANCED CONCEPTS

- Python iterator
- Python generator
- Python closure
- Python decorators
- Pip (installation of external python libraries by using pip)

PYTHON WEB DEVELOPMENT

- Introduction to web-based application
- Introduction to python web frameworks (Django, flask)

===Thank You===