Python

MODULE 1: Getting Started with Python

- What is Python?
- Features of Python
- Applications of Python
- Basic Python Syntax and First Program in Python
- How to Install Python?
- Difference Between Python 2 vs. Python 3

MODULE 2: Python Basic Constructs

- Python First Program
- Indentation in Python
- Variables in Python
- Python Keywords and Identifiers
- Literals in Python
- Python Comments
- Operators in Python
- Python Input and Output
- Implicit Type Conversion in Python
- Explicit Type Conversion in Python
- Boolean Operators in Python

MODULE 3: Python Flow Control

- Control Flow Statements in Python
- Python if…else Statement
- While Loop in Python
- Python For Loops
- Python For Else
- Break, Pass and Continue Statement in Python

MODULE 4: Python Strings

- Strings in Python
- String Slicing in Python
- Python String Methods
- String Formatting in Python

MODULE 5: Python Functions

- Python Functions
- Scope of Variable in Python
- Python Function Arguments
- *args and **kwargs in Python
- Packing and Unpacking Arguments in Python
- Python Lambda
- Recursion in Python

MODULE 6: Python Data Structures

- What is List in Python?
- Dictionary in Python
- Sets in Python
- Numbers in Python
- Tuples in Python
- Differences Between List, Tuple, Set and Dictionary in Python
- Python Comprehensions

MODULE 7: Python Exception Handling

- Python Exception Handling
- Assert in Python

MODULE 8: Python File Handling

- Opening and Closing Files in Python
- How to Read from a File in Python?
- Writing to File in Python
- Delete a File in Python
- with Statement in Python

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MODULE 9: Python OOP

- Class in Python: What is Python Class?
- What is Object in Python?
- Inheritance in Python
- Encapsulation in Python
- Polymorphism in Python with Examples
- Data Abstraction in Python
- Python Iterators
- Python Generators
- Python Decorators
- Python Closure
- Python @property

MODULE 10: Python Advanced Constructs

- Modules in Python
- Python Packages
- Python Collection Module
- Regular Expression in Python
- Python DateTime Module