An ISO 9001:2015 Certified Organization

दिल्ली सरकार द्वारा मान्यता प्राप्त

PYTHON PROGRAMMING COURSE - 2 MONTHS

- ✓ **Module 1: PYTHON BASICS**
- ✓ Variables and data types
- ✓ Type casting
- ✓ Constants in Python
- ✓ Input and output (input(), print())
- ✓ Comments and docstrings
- ✓ Reserved keywords

MODULE 2: OPERATORS IN PYTHON

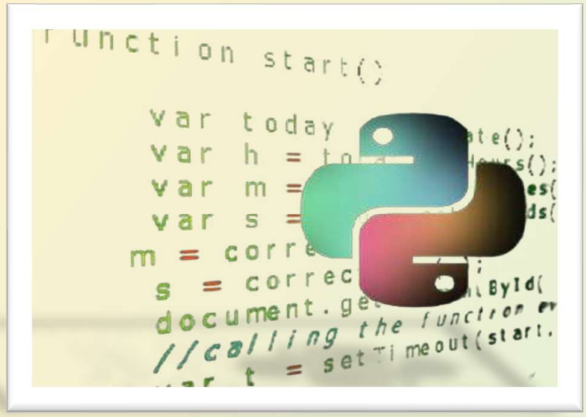
- ✓ Arithmetic operators
- ✓ Relational (comparison) operators
- ✓ Logical operators
- ✓ Assignment operators
- ✓ Identity operators (is, is not)
- ✓ Membership operators (in, not in)
- ✓ Operator precedence

MODULE 3: CONTROL FLOW STATEMENTS

- ✓ Decision-making:
- ✓ if, if-else, if-elif-else
- ✓ Nested conditions
- ✓ Looping:
- ✓ for loop
- ✓ while loop
- ✓ Loop control:
- ✓ break, continue, pass
- ✓ else with loops

MODULE 4: DATA STRUCTURES IN PYTHON

- ✓ Lists:
- ✓ Creation, indexing, slicing
- ✓ List methods
- ✓ Tuples:
- ✓ Immutable sequences
- ✓ Tuple packing and unpacking
- ✓ Sets:
- ✓ Creating sets
- ✓ Set operations (union, intersection, difference)
- ✓ Dictionaries:
- ✓ Key-value pairs
- ✓ Dictionary methods
- ✓ String operations and formatting



JOB OREIENTED COURSES | 100% JOB GUARNTEE | EXPERIENCED FACULTY | WEEKLY TEST | PROJECT & ASSIGNMENT WORK

MODULE 5: FUNCTIONS IN PYTHON

- ✓ Defining and calling functions
- ✓ Function parameters and return values
- ✓ Default, keyword, and variable-length arguments (*args, **kwargs)
- ✓ Lambda functions
- ✓ Scope and lifetime of variables
- ✓ Recursion

MODULE 6: FILE HANDLING

- ✓ Reading and writing text files
- ✓ Reading and writing binary files
- ✓ File methods (open, read, write, close)
- ✓ File modes
- ✓ Exception handling in file operations

MODULE 7: EXCEPTION HANDLING

- ✓ Errors vs exceptions
- ✓ Try-except block
- ✓ Else and finally clauses
- ✓ Raising exceptions
- ✓ Custom exceptions

MODULE 8: OBJECT-ORIENTED PROGRAMMING IN PYTHON

- ✓ Classes and objects
- ✓ Instance and class variables
- ✓ Instance and class methods
- ✓ Constructors (init)
- ✓ Inheritance (single, multiple, multilevel)
- ✓ Method overriding
- ✓ Polymorphism
- ✓ Encapsulation and abstraction
- ✓ Magic methods (str , len , etc.)

MODULE 9: ADVANCED PYTHON CONCEPTS

- ✓ Iterators and generators
- ✓ Decorators
- ✓ Comprehensions (list, set, dictionary)
- ✓ zip(), map(), filter(), reduce()
- ✓ Regular expressions (re module)
- ✓ Date and time operations
- ✓ JSON handling

MODULE 10: PROJECT WORK S PRACTICE

- ✓ Mini-project ideas:
  - ➢ Personal expense tracker
  - ➢ Weather app using API
  - ➢ Web scraper for news headlines
  - ➢ Simple quiz game
- ✓ Debugging and best coding practices