**Python Course Content**

1. Introduction to Python and Basics
   1. Variables and why variables ?
   2. Data types - Primitive
   3. Comments
   4. Operators,
      1. Arithmetic Operator
      2. Comparison Operator
      3. Logical Operator
      4. Assignment Operator
      5. Membership Operator
      6. Identity Operator
      7. Bitwise Operator
   5. Type Casting
   6. Input Functions
   7. Ways of Printing
   8. ord() and Chr() -> ASCII Concept
2. Conditional Statements and it’s Applications,
   1. Only IF Condition
   2. IF - Else Condition
   3. ELIF Ladder
   4. Nested Conditional Statements
   5. Multiple Conditional Statements
3. Loops,
   1. While Loop
   2. For Loop
      1. With Range
      2. Without Range
4. Non - Primitive Data types
   1. String and String Inbuilt Functions
   2. List and List Inbuilt Functions
   3. Tuples and Tuples Inbuilt Functions
   4. Set and Set Inbuilt Functions
   5. Dictionary and Dictionary Inbuilt Functions
5. Functions
   1. Function Creation and Usage
   2. Types of Functions
   3. Types of functions arguments
   4. Nested Function
6. Introduction to Classes and Objects,
   1. why Classes ? and Class and Object creation.
   2. OOPS Concept
      1. Inheritance and Types of Inheritance
      2. Abstract Classes
      3. Polymorphism and why Polymerphism ?
      4. Access Specifier ->
         1. Public and Private
      5. Static, Instance and Class Method
   3. Magic Functions
7. Exception Handling,
   1. Try, Except and Finally
   2. Raise and Assert
8. Regular Expressions
   1. Findall()
   2. Split()
   3. Sub()
9. Modules
   1. Predefined Modules
   2. Make your python Files as Inbuilt Module
10. Special Concepts
    1. Lambda Functions
    2. Zip()
    3. Map()
    4. Reduce()
    5. Filter()
    6. Args( \* ) and Kwargs( \*\* )
    7. Decorators and Why Decorators ?
    8. Iterators
    9. Generators and Why generators ?
11. 1 Mini Project( Python + DBMS/SQL )