Python Training

Complete Practical & Real-time Trainings

SQL School™

Quality Training Assured

A Unit of SequelGate Innovative Technologies Pvt. Ltd.

→ ISO Certified Training Institute → Microsoft Certified Partner

Training Highlights :

- ✓ Complete Practical and Real-time Scenarios
- ✓ Session wise Material and Practice Labs
- ✓ Session wise Notes & Doubts Clarifications
- ✓ Certification Material & Resume Preparation
- ✓ Interview Preparation and Guidance
- ✓ Technical Support and Placements Assistance
- ✓ One Real-time Project and FAQs with Answers
- ✓ Mock Interview and Course Completion Certificate

All Training Sessions are Completely Practical & Real-time

Every session includes Study Material and Practice Material.

Module - 1 : Core Python	Module -2 : Advance Python
CHAPTER 1 : Introduction to Script • What is Script • What is a program? • Types of Scripts • Difference between Script & Programming Languages • Features of Scripting • Limitation of Scripting • Types of programming Language Paradigms	**CHAPTER 17 : Python Modules** • What is a Module? • Types of Modules • The import Statement • The from…import Statement • ..import * Statement • Underscores in Python • The dir( ) Function • Creating User defined Modules • Command line Arguments • Python Module Search Path
CHAPTER 2 : Introduction to Python • What is Python? • Why Python? • Who Uses Python? • Characteristics of Python • History of Python • What is PSF? • Python Versions • How to Download Python • How to Install Python • Install Python with Diff IDEs • Features of Python • Limitations of Python • Python Applications • Creating Your First Python Program • Printing to the Screen • Reading Keyboard Input • Using Command Prompt and GUI or IDE • Python Distributions	**CHAPTER 18 : Packages in Python** • What is a Package? • Introduction to Packages? • py file • Importing module from a package • Creating a Package • Creating Sub Package • Importing from Sub-Packages • Popular Python Packages **CHAPTER 19 : Python Date and Time** • How to Use Date & DateTime Class • How to Format Time Output • How to use Timedelta Objects • Calendar in Python • datetime classes in Python • How to Format Time Output? • The Time Module • Python Calendar Module • Python Text Calendar • Python HTML Calendar Class • Unix Date and Time Commands
CHAPTER 3 : Different Modes in PYTHON • Execute the Script • Interactive Mode • Script Mode • Python File Extensions • SETTING PATH IN Windows • Clear screen inside python	**CHAPTER 20 : File Handling** • What is a data, Information File? • File Objects • File Different Modes • file Object Attributes • How to create a Text File • How to Append Data to a File

- Learn Python Main Function
- Python Comments
- Quit the Python Shell
- Shell as a Simple Calculator
- Order of operations
- Multiline Statements
- Quotations in Python
- Python Path Testing
- Joining two lines
- Python Implementation Alternatives
- Python Sub Packages
- Uses of Python in Data Science
- USES OF PYTHON IN IOT
- Working with Python in Unix/Linux/Windows/Mac/Android..!!

- How to Read a File
- Closing a file
- Read, read line ,read lines, write, write lines…!!
- Renaming and Deleting Files
- Directories in Python
- Working with CSV files
- Working with CSV Module
- Handling IO Exceptions

CHAPTER 4 : PYTHON NEW IDEs

- PyCharm IDE
- How to Work on PyCharm
- PyCharm Components
- Debugging process in PyCharm
- PYTHON Install Anaconda
- What is Anaconda?
- Coding Environments
- Spyder Components
- General Spyder Features
- Spyder Shortcut Keys
- Jupyter Notebook
- What is Conda?
- Conda List?
- Jupyter and Kernels
- What is PIP?

CHAPTER 21 : Python OS Module

- Shell Script Commands
- Various OS operations in Python
- Python File System Shell Methods

CHAPTER 22 : Python Exception Handling

- Python Errors
- Common RunTime Errors in PYTHON
- Abnormal termination
- Chain of importance Of Exception
- Exception Handling
- Try … Except
- Try .. Except .. else
- Try … finally
- Argument of an Exception
- Python Custom Exceptions
- Ignore Errors
- Assertions
- UsingAssertionsEffectively

CHAPTER 5 : Variables in Python

- What is Variable?
- Variables in Python
- Constants in Python
- Variable and Value
- Variable names
- Mnemonic Variable Names
- Values and Types
- What Does “Type” Mean?
- Multiple Assignment

CHAPTER 23 : More Advanced PYTHON

- Python Iterators
- Python Generators
- Python Closures
- Python Decorators
- Python @property

- Python different numerical types
- Standard Data Types
- Operators and Operands
- Order of Operations
- Swap variables
- Python Mathematics
- Type Conversion
- Mutable Versus Immutable Objects

CHAPTER 6 : String Handling

- What is string?
- String operations
- String indices
- Basic String Operations
- String Functions, Methods
- Delete a string
- String Multiplication and concatenation
- Python Keywords
- Python Identifiers
- Python Literals
- String Formatting Operator
- Structuring with indentation in Python
- Built-in String Methods
- Define Data Structure?
- Data Structures in PYTHON

CHAPTER 7: Python Operators and Operands

- Arithmetic Operators
- Relational Operators
- Comparison Operators
- Python Assignment Operators
- Short hand Assignment Operators
- Logical Operators or Bitwise Operators
- Membership Operators
- Identity Operators
- Operator precedence
- Evaluating Expressions

CHAPTER 24 : Python Class and Objects

- Introduction to OOPs Programming
- Object Oriented Programming System
- OOPS Principles
- Define Classes
- Creating Objects
- Class variables and Instance Variables Constructors
- Basic concept of Object and Classes
- Access Modifiers
- How to define Python classes
- Python Namespace
- Self-variable in python
- Garbage Collection
- What is Inheritance? Types of Inheritance?
- How Inheritance works?
- Python Multiple Inheritance
- Overloading and Over Riding
- Polymorphism
- Abstraction
- Encapsulation
- Built-In Class Attributes

CHAPTER 25 : Python Regular Expressions

- What is Regular Expression?
- Regular Expression Syntax
- Understanding Regular Expressions
- Regular Expression Patterns
- Literal characters
- Repetition Cases
- Example of w+ and ^ Expression
- Example of \s expression in re.split function
- Using regular expression methods
- Using re.match()
- Finding Pattern in Text (re.search())
- Using re.findall for text
- Python Flags
- Methods of Regular Expressions

CHAPTER 8 : Python Conditional Statements

- How to use "if condition" in conditional structures
- if statement (One-Way Decisions)
- if .. else statement (Two-way Decisions)
- How to use "else condition"
- if .. elif .. else statement (Multi-way)
- When "else condition" does not work
- How to use "elif" condition
- How to execute conditional statement with minimal code
- Nested IF Statement

CHAPTER 9 : Python LOOPS

- How to use "While Loop"
- How to use "For Loop"
- How to use For Loop for set of other things besides numbers
- Break statements in For Loop
- Continue statement in For Loop
- Enumerate function for For Loop
- Practical Example
- How to use for loop to repeat the same statement over and again
- Break, continue statements

CHAPTER 10 : Learning Python Strings

- Accessing Values in Strings
- Various String Operators
- Some more examples
- Python String replace() Method
- Changing upper and lower case strings

CHAPTER 26 : Python XML Parser

- What is XML?
- Difference between XML and HTML
- Difference between XML and JSON and Gson
- How to Parse XML
- How to Create XML Node
- Python vs JAVA
- XML and HTML

CHAPTER 27 : Python-Data Base Communication

- What is Database? Types of Databases?
- What is DBMS?
- What is RDBMS?
- What is Big Data? Types of data?
- Oracle
- MySQL
- SQL server
- DB2
- Postgre SQL
- Executing the Queries
- Bind Variables
- Installing of Oracle Python Modules
- Executing DML Operations..!!

CHAPTER 28 : Multi-Threading

- What is Multi-Threading
- Threading Module
- Defining a Thread
- Thread Synchronization

CHAPTER 29 : Multi-Threading

- What is Multi-Threading
- Threading Module
- Defining a Thread
- Thread Synchronization

- Using "join" function for the string
- Reversing String
- Split Strings

CHAPTER 30 : Web Scrapping

- The components of a web page
- BeautifulSoup
- Urllib2
- HTML,CSS,JS,jQuery
- Dataframes
- PIP
- Installing External Modules Using PIP

CHAPTER 11 : Sequence or Collections in PYTHON

- Strings
- Unicode Strings
- Lists
- Tuples
- buffers
- xrange

CHAPTER 31 : Unit Testing with PyUnit

- What is Testing?
- Types of Testings and Methods?
- What is Unit Testing?
- What is PyUnit?
- Test scenarios, Test Cases, Test suites

CHAPTER 12 : Python Lists

- Lists are mutable
- Getting to Lists
- List indices
- Traversing a list
- List operations
- List slices
- List methods
- Map, filter and reduce
- Deleting elements
- Lists and strings

CHAPTER 32 : Introduction to Python Web Frameworks

- Django – Design
- Advantages of Django
- MVC and MVT
- Installing Django
- Designing Web Pages
- HTML5, CSS3, AngularJS
- PYTHON Flask
- PYTHON Bottle
- PYTHON Pyramid
- PYTHON Falcon

CHAPTER 13 : Python TUPLE

- Advantages of Tuple over List
- Packing and Unpacking
- Comparing tuples
- Creating nested tuple
- Using tuples as keys in dictionaries
- Deleting Tuples
- Slicing of Tuple
- Tuple Membership Test
- Built-in functions with Tuple

CHAPTER 33 : GUI Programming-Tkinter

- Introduction
- Components and Events
- Adding Controls
- Entry Widget, Text Widget, Radio Button, Check Button
- List Boxes, Menus, ComboBox

- Dotted Charts

CHAPTER 14 : Python Sets

- How to create a set?
- Iteration Over Sets
- Python Set Methods
- Python Set Operations
- Union of sets
- Built-in Functions with Set
- Python Frozenset

CHAPTER 15 : Python Dictionary

- How to create a dictionary?
- PYTHON HASHING?
- Python Dictionary Methods
- Copying dictionary
- Updating Dictionary
- Delete Keys from the dictionary
- Dictionary items() Method
- Sorting the Dictionary
- Python Dictionary in-built Functions
- Dictionary len() Method
- Variable Types
- Python List cmp() Method
- Dictionary Str(dict)

CHAPTER 16 : Python Functions

- What is a function?
- How to define and call a function in Python
- Types of Functions
- Significance of Indentation (Space) in Python
- How Function Return Value?
- Types of Arguments in Functions
- Default Arguments
- Non-Default Arguments
- Keyword Arguments
- Non-keyword Arguments
- Arbitrary Arguments
- Rules to define a function in Python
- Various Forms of Function Arguments
- Scope and Lifetime of variables
- Nested Functions
- Call By Value, Call by Reference
- Anonymous Functions/Lambda functions

CHAPTER 34 : Data Analytics

- Introduction to data Big Data?
- Introduction to NumPY and SciPY
- Introduction to Pandas and MatPlotLib

CHAPTER 35 : Introduction to Machine Learning with PYTHON

- What is Machine learning?
- Machine Learning Methods
- Predictive Models
- Descriptive Models
- What are the steps used in Machine Learning?
- What is Deep Learning?

CHAPTER 36 : Data Science

- What is Data Science?
- Data Science Life Cycle?
- What is Data Analysis
- What is Data Mining
- Analytics vs Data Science

CHAPTER 37 : Internet of Things

- IMPACT OF THE INTERNET
- What is IOT
- History of IoT
- What is Network?
- What is Protocol?
- What is smart?
- How IoT Works?
- The Future of IoT

ALL TRAINING SESSIONS ARE COMPLETELY PRACTICAL, REAL-TIME.

Pre-requisites for this SQL Server T-SQL Course:

This is a starter course, **no pre-requisites** required. Course includes free orientation classes for starters.

About Trainer:

Mr. Sai Phanindra Tholeti is a Database Consultant working for his own company - *SequelGate Innovative Technologies Pvt. Ltd*. With more than 11 years of expertise and passion for SQL Server, Administration (SQL DBA) and Business Intelligence (MSBI) - Mr. Sai provides Data Hosting, Business Consulting to Corporate Clients. All his training sessions are completely **practical**, **real-time** and highly **interactive**. Complete profile at **http://www.linkedin.com/in/saiphanindra**

For Free Demo / Further Clarifications, please reach us.

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