

Data Science Training

Complete Practical & Real-time Training Sessions

SQL SchoolTM
Quality Training Assured

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 Trainings Session Are Completely Practical & Real Time

Every session includes Study Material and Practice Material.

Hadoop Training

All Our Training Sessions are COMPLETELY PRACTICAL & REAL-TIME.

CHAPTER 1 : INTRODUCTION TO BIG DATA

- ✓ What is Big Data
- ✓ Big Data Challenges
- ✓ Big Data opportunities
- ✓ Characteristics of Big Data
- ✓ Introduction to Analytics and the need for big data analytics
- ✓ Real Time Big Data Use Cases

CHAPTER 2 : THE MOTIVATION FOR HADOOP

- ✓ Comparing Hadoop Vs. Traditional systems
- ✓ Problems with traditional large-scale systems
- ✓ Data Storage
- ✓ Data Processing
- ✓ Requirements for a new approach
- ✓ History of Hadoop
- ✓ Hadoop Solutions - Big Picture
- ✓ Hadoop distributions

CHAPTER 3 : HADOOP BASIC CONCEPTS

- ✓ What is Hadoop?
- ✓ The Hadoop Distributed File System
- ✓ How Map Reduce Works
- ✓ Anatomy of a Hadoop Cluster

CHAPTER 4 : HADOOP 1.0 DEMONS

- ✓ Master Daemons
- ✓ Name node
- ✓ Job Tracker
- ✓ Secondary name node
- ✓ Slave Daemons
- ✓ Job tracker
- ✓ Task tracker

CHAPTER 5 : HDFS (HADOOP DISTRIBUTION FILE SYSTEM)

- ✓ Blocks and Splits
- ✓ Input Splits
- ✓ HDFS Splits
- ✓ Data Replication

CHAPTER 15 : Monitoring and debugging on a Production Cluster

- ✓ Counters
- ✓ Skipping Bad Records
- ✓ Rerunning failed tasks

CHAPTER 16 : Tuning for Performance

- ✓ Reducing network traffic with combiner
- ✓ Reducing the amount of input data
- ✓ Using Compression
- ✓ Running with speculative execution
- ✓ Refactoring code and rewriting algorithms
- Parameters affecting Performance
- ✓ Other Performance Aspects

CHAPTER 17 : Hadoop Yarn

- ✓ Hadoop 1.X vs. Hadoop 2.X
- ✓ Yarn basics
- ✓ Resource Manager
- ✓ Scheduler

Chapter 18 : Hadoop Ecosystem- Hive

- ✓ Hive concepts
- ✓ Hive architecture
- ✓ Hive shell
- ✓ Hive server
- ✓ Hive metastore
- ✓ Install and configure hive on cluster
- ✓ Create database, access it console
- ✓ Buckets, Partitions
- ✓ Joins in Hive
- ✓ Inner joins
- ✓ Outer joins
- ✓ Hive UDF
- ✓ Hive UDAF
- ✓ Hive UDTF
- ✓ Develop and run sample applications in Java to access hive
- ✓ Load Data into Hive and process it using Hive

- ✓ Hadoop Rack Aware
- ✓ Name node
- ✓ Data Node
- ✓ Secondary Name node
- ✓ Metadata
- ✓ FS Image and Edit log
- ✓ Data high availability
- ✓ Data Integrity
- ✓ Cluster architecture and block placement

CHAPTER 6 : JAVA AND LINUX COMMANDS

- ✓ Java basics
- ✓ Linux basic commands

CHAPTER 7: HDFS COMMANDS

- ✓ ls,
- ✓ Mv
- ✓ copyFromLocal, copyFromLocal, put
- ✓ Basic file system Operations
- ✓ Hdfs admin related commands

CHAPTER 8 : PROGRAMMING PRACTICES

- ✓ Developing Map Reduce Programs in Local Mode
- ✓ Running without HDFS and Map reduce
- ✓ Pseudo-distributed Mode
- ✓ Running all daemons in a single node
- ✓ Fully distributed mode

CHAPTER 9 : HADOOP ADMINISTRATIVE TASKS - Setup Hadoop cluster of Apache, Cloud era and Horton Works

- ✓ Install and configure Apache Hadoop
- ✓ Make a fully distributed Hadoop cluster on a single laptop/desktop (Pseudo Mode)
- ✓ Install and configure Hadoop distribution in fully distributed mode
- ✓ Monitoring the cluster
- ✓ Getting used to management console of Cloud era and Horton Works
- ✓ Name Node in Safe mode
- ✓ Meta Data Backup
- ✓ Introduction to Integrating Kerberos security in Hadoop
- ✓ Commissioning/Decommissioning Nodes.
- ✓ BUILDING and CONFIGURING SINGLE NODE AND MULTINODE CLUSTER

CHAPTER 19 : PIG

- ✓ Pig basics
- ✓ Install and configure PIG on a cluster
- ✓ PIG Vs Map Reduce and SQL
- ✓ PIG Vs Hive
- ✓ Write sample Pig Latin scripts
- ✓ Modes of running PIG
- ✓ Running in Grunt shell
- ✓ Programming in Eclipse
- ✓ Running as Java program
- ✓ PIG UDFs
- ✓ PIG Macros
- ✓ Load data into Pig and process it using Pig

CHAPTER 20 : SQOOP

- ✓ Install and configure Sqoop on cluster
- ✓ Connecting to RDBMS
- ✓ Installing Mysql
- ✓ Import data from Oracle/Mysql to hive
- ✓ Export data to Oracle/Mysql
- ✓ Internal mechanism of import/export
- ✓ Import millions of records into HDFS from RDBMS using Sqoop

CHAPTER 21 : HBASE

- ✓ Data Retrieval - Radom Access Vs. Sequential Access
- ✓ NoSQL Databases
- ✓ HBase concepts
- ✓ HBase architecture
- ✓ Region server architecture
- ✓ File storage architecture
- ✓ HBase basics
- ✓ Cloumn access
- ✓ Scans
- ✓ HBase Use Cases
- ✓ Install and configure HBase on cluster
- ✓ Create database, Develop and run sample applications
- ✓ Access data stored in HBase using clients like Java
- ✓ Map Rescue client to access the HBase data
- ✓ HBase and Hive Integration
- ✓ HBase admin tasks
- ✓ Defining Schema and basic operation

CHAPTER 10 : HAOOP DEVELOPER TASKS- Writing a Map Reduce Program

- ✓ Examining a Sample Map Reduce Program
- ✓ Word Count Program
- ✓ Basic API Concepts
- ✓ The Driver Code
- ✓ The Mapper
- ✓ The Reducer
- ✓ Hadoop's Streaming API

CHAPTER 11 : Performing several Hadoop Jobs

- ✓ Processing video files and audio files
- ✓ Processing image files
- ✓ Processing XML files
- ✓ Processing Zip files
- ✓ Directly Accessing HDFS

CHAPTER 12 : Common Map Reduce Algorithms

- ✓ Sorting and Searching
- ✓ Indexing
- ✓ Hands-On Exercise
- ✓ Identify Mapper
- ✓ Identify Reducer
- ✓ Exploring well known problems using Map Reduce applications.

CHAPTER 13 : Debugging Map Reduce Programs

- ✓ Testing with MR Unit
- ✓ Logging
- ✓ Other Debugging Strategies.

CHAPTER 14 : Advanced Map Reduce Programming

- ✓ A Recap of the Map Reduce Flow
- ✓ Custom Writable and Writable Comparables
- ✓ The Secondary Sort
- ✓ Creating Input Formats and Output Formats
- ✓ Pipelining Jobs With Oozie
- ✓ Map-Side Joins
- ✓ Reduce-Side Joins.

CHAPTER 22 : CASSANDRA

- ✓ Cassandra core concepts
- ✓ Install and configure Cassandra on cluster
- ✓ Create database, tables and access it console
- ✓ Developing applications to access data in Cassandra through Java
- ✓ Install and Configure Ops Center to access Cassandra data using browser

CHAPTER 23 : OOZIE

- ✓ Oozie architecture
- ✓ XML file specifications
- ✓ Install and configure Oozie on cluster
- ✓ Specifying Work flow
- ✓ Action nodes
- ✓ Control nodes
- ✓ Oozie job coordinator
- ✓ Accessing Oozie jobs command line and using web console
- ✓ Create a sample workflows in oozie and run them on cluster

CHAPTER 24 : Introduction to Zookeeper, Flume, Chukwa, Avro, Scribe,Thrift, HCatalog

- ✓ Flume and Chukwa Concepts
- ✓ Use cases of Thrift ,Avro and scribe
- ✓ Install and Configure flume on cluster

CHAPTER 25 : ANALYTICS BASIC

- ✓ Analytics and big data analytics
- ✓ Commonly used analytics algorithms
- ✓ R language basics
- ✓ python language basics
- ✓ Mahout

CHAPTER 26 : CDH5 and Horton Works

- ✓ Comparison
- ✓ Vendors

Spark & Scala Training

Chapter 1: Scala Introduction & Environment Setup

- ✓ Java vs Scala
- ✓ Scala is object-oriented,
- ✓ Scala is functional,
- ✓ Scala runs on the JVM
- ✓ Installing Scala

Chapter 2: Scala Basic Syntax

- ✓ First Scala Program
- ✓ Interactive Mode Programming
- ✓ Script Mode Programming

Chapter 3: Scala Data Types

- ✓ Literals
- ✓ Strings
- ✓ Escape Sequences

Chapter 4: Scala Variables:

- ✓ Declaration
- ✓ Data Types
- ✓ Type Inference
- ✓ Multiple assignments
- ✓ Variable Types

Chapter 5: Scala Operators:

- ✓ Arithmetic
- ✓ Relational
- ✓ Logical
- ✓ Operator Precedence in Scala

Chapter 6: Scala Conditions

Chapter 7: Scala Loops

Chapter 8: Scala Strings

Chapter 9: Scala closures and traits

Chapter 10: Scala Regular Expressions

- ✓ Forming regular expressions

Chapter 14: Scala Classes & Objects:

- ✓ OOps Basics
- ✓ Defining Fields, Methods, Constructors

Chapter 15: Introduction to Apache Spark:

- ✓ What is Spark?
- ✓ Spark Ecosystem, & modes of Spark
- ✓ overview of Spark on a cluster
- ✓ Spark Standalone cluster
- ✓ Spark Web UI &
- ✓ Spark Common Operations

Chapter 16: Spark Core

- ✓ performing basic Operations on files in Spark Shell and Overview of SBT
- ✓ building a Spark project with SBT
- ✓ running Spark project with SBT
- ✓ Playing with RDDs:
- ✓ RDDs, transformations in RDD, actions in RDD
- ✓ loading data in RDD
- ✓ saving data through RDD
- ✓ Key-Value Pair RDD
- ✓ Map Reduce and Pair RDD Operations
- ✓ Spark and Hadoop Integration-Yarn

Chapter 17: Spark SQL

- ✓ Spark SQL and Performance Tuning in Spark:
- ✓ Analyze Hive and Spark SQL architecture, SQL Context in Spark SQL
- ✓ working with Data Frames
- ✓ implementing an example for Spark SQL
- ✓ integrating hive and Spark SQL
- ✓ support for JSON and Parquet File Formats
- ✓ implement data visualization in Spark
- ✓ loading of data
- ✓ Hive queries through Spark
- ✓ performance tuning tips in Spark

Chapter 18: Spark Streaming

- ✓ A Simple Example
- ✓ Architecture and Abstraction
- ✓ Transformations

<ul style="list-style-type: none"> ✓ Matching Literals and Constants ✓ Matching Tuples and Lists ✓ Matching with Types and Guards ✓ Pattern Variables and Constants in case Expressions ✓ Regular-expression Examples ✓ Pattern matching with Extractors <p>Chapter 11: Scala Functions:</p> <ul style="list-style-type: none"> ✓ Declarations ✓ Definitions ✓ Calling ✓ Function Literals ✓ Anonymous ✓ Currying <p>Chapter 12: Scala Arrays</p> <ul style="list-style-type: none"> ✓ Declaring ✓ Processing ✓ Multi-Dimensional ✓ Create Array with Range ✓ Scala Arrays Methods <p>Chapter 13: Scala Collections</p> <ul style="list-style-type: none"> ✓ Basic Operations on List, ✓ Concatenating Lists ✓ Creating Uniform Lists ✓ Tabulating a Function ✓ Scala List Methods ✓ Concatenating Sets, Find max, min elements in Set ✓ Find common values in Sets ✓ Scala Set Methods ✓ Basic Operations on Map ✓ Check for a Key in Map 	<ul style="list-style-type: none"> ✓ Stateless Transformations ✓ Stateful Transformations ✓ Output Operations ✓ Input Sources ✓ Additional Sources ✓ Multiple Sources and Cluster Sizing ✓ Worker Fault Tolerance ✓ Receiver Fault Tolerance ✓ Processing Guarantees ✓ Streaming UI ✓ Batch and Window Sizes ✓ Level of Parallelism <p>Chapter 19: Spark Graph</p> <ul style="list-style-type: none"> ✓ Edges ✓ Vertices ✓ Types of Graphs ✓ Usages ✓ Simple Program <p>Chapter 20: SPARK Mlib</p> <ul style="list-style-type: none"> ✓ Vectors ✓ Labeled points ✓ Labels ✓ Features ✓ RDD with Vectors ✓ Matrices, Stats, Math's ✓ Algorithms with Spark Mlib <p>Chapter 21: Spark with Scala Machine Learning model</p>
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Machine Learning with Python Training

<p>CHAPTER 1: Introduction to Script</p> <ul style="list-style-type: none"> ✓ What is Script ✓ What is a program? ✓ Types of Scripts ✓ Difference between Script & Programming Languages ✓ Features of Scripting ✓ Limitation of Scripting 	<p>CHAPTER 17 : Python Modules</p> <ul style="list-style-type: none"> ✓ What is a Module? ✓ Types of Modules ✓ The import Statement ✓ The from...import Statement ✓ ..import * Statement ✓ Underscores in Python ✓ The dir() Function
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- ✓ Types of programming Language Paradigms

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 3: Different Modes in PYTHON

- ✓ Execute the Script
- ✓ Interactive Mode
- ✓ Script Mode
- ✓ Python File Extensions
- ✓ SETTING PATH IN Windows
- ✓ Clear screen inside python
- ✓ 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..!!

CHAPTER 4 : PYTHON NEW IDEs

- ✓ PyCharm IDE
- ✓ How to Work on PyCharm
- ✓ PyCharm Components
- ✓ Debugging process in PyCharm
- ✓ PYTHON Install Anaconda

- ✓ Creating User defined Modules
- ✓ Command line Arguments
- ✓ Python Module Search Path

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 & Date Time Class
- ✓ How to Format Time Output
- ✓ How to use Time delta Objects
- ✓ Calendar in Python
- ✓ date time 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 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
- ✓ 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 21 : Python OS Module

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

- ✓ What is Anaconda?
- ✓ Coding Environments
- ✓ Spyder Components
- ✓ General Spyder Features
- ✓ Spyder Shortcut Keys
- ✓ Jupyter Notebook
- ✓ What is Anaconda?
- ✓ Conda List?
- ✓ Jupyter and Kernels
- ✓ What is PIP?

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
- ✓ 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

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
- ✓ Using Assertions Effectively

CHAPTER 23 : More Advanced PYTHON

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

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?

- ✓ Comparison Operators
- ✓ Python Assignment Operators
- ✓ Short hand Assignment Operators
- ✓ Logical Operators or Bitwise Operators
- ✓ Membership Operators
- ✓ Identity Operators
- ✓ Operator precedence
- ✓ Evaluating 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
- ✓ Using “join” function for the string
- ✓ Reversing String
- ✓ Split Strings

CHAPTER 11 : Sequence or Collections in

- ✓ 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 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 : Unit Testing with PyUnit

- ✓ What is testing?
- ✓ Types of Testings and Methods?
- ✓ What is Unit Testing?

PYTHON

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

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 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
- ✓ 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

- ✓ What is PyUnit?
- ✓ Test scenarios, Test Cases, Test suites

CHAPTER 30: 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 31 : Data Analytics

- ✓ Introduction to data Big Data?
- ✓ Python for Analytics

CHAPTER 32 : Python Libraries Overview

- ✓ scipy
- ✓ numpy
- ✓ matplotlib
- ✓ pandas
- ✓ sklearn

CHAPTER 33 : Data Science

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

CHAPTER 34 : Introduction to Machine Learning

- ✓ What is Machine Learning?
- ✓ Supervised learning
- ✓ unsupervised learning
- ✓ Define Problem
- ✓ Prepare Data.
- ✓ Evaluate Algorithms.
- ✓ Improve Results.
- ✓ Present Results

- ✓ 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
- ✓ Passing functions to function
- ✓ map(), filter(), reduce() functions
- ✓ What is a Docstring?

CHAPTER 35: Using Machine Learning Algorithms in python

- ✓ Linear Regression
- ✓ Logistic Regression
- ✓ Decision Tree
- ✓ CART
- ✓ SVM
- ✓ Naive Bayes
- ✓ kNN
- ✓ K-Means
- ✓ Random Forest
- ✓ Dimensionality Reduction Algorithms
- ✓ Gradient Boosting algorithms

Machine Learning with R Training

Getting Started R

- R Basics
- Variables and Class
- Vectors, List, Factors, Matrix
- Data Frames
- Missing Values
- Data Reading and Writing data
- Data Visualization using GGLOT
- If-Else Conditions
- Function
- Loops
- Data manipulation

Graphics

- Edges
- Vertices
- Graphs
- Programs

Machine Learning

- Introduction to Machine Learning
- Types Of Machine Learning
- Real time use cases in Machine Learning
- Types of Algorithms Types of Problems –
 - Regression

<ul style="list-style-type: none"> • Python • Python Basics • Python Lists • Functions and Packages • Numpy • Control flow and Pandas <p>Probability</p> <ul style="list-style-type: none"> • Counting Combinations, Generating Combinations • Generating Random Numbers • Generating Reproducible Random Numbers • Generating a Random Sample • Generating Random Sequences • Randomly Permuting a Vector • Probabilities for Discrete Distributions • Probabilities for Continuous Distributions, Converting • Probabilities to Quantiles, Plotting a Density Function 	<ul style="list-style-type: none"> ○ Classification ○ Clustering ○ Collaborative Filtering ○ Optimization ○ Prediction • Regression – <ul style="list-style-type: none"> ○ Linear Regression ○ Logistic Regression • Classification – <ul style="list-style-type: none"> ○ Logistic Regression ○ Decision Tree, Random Forest ○ KNN, SVM ○ Naive Bayes • Clustering – <ul style="list-style-type: none"> ○ K-means Clustering
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ALL TRAININGS ARE COMPLETELY PRACTICAL & REAL TIME

For Free Demo / Further Clarifications, please reach us.

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