

# Teradata - Course Content

## **Introduction**

- What is Teradata
- Overview of Teradata
- Data warehouse concepts

## **Teradata Architecture and Components**

- Teradata Architecture
- SMP Architecture
- MPP Architecture
- AMP(Access Module Processing)
- TDP(Teradata Directory Program)
- CLI(Call Level Interface)
- TPA(Trusted Parallel Application)
- Parallelism Architecture
- Benefits and Types

## **Data Recovery and Security**

- locks
- RAID 1&RAID 5
- Disk Arrays
- Fall Back
- Clique
- AMP Clustering
- Journaling
- Answering various recovery questions

## **Teradata Indexes**

- Primary Index
- Unique
- Non unique
- Partitioned
- Secondary Index
- Unique
- NonUnique
- Hash, Join, Value Ordered
- Skewness
- Secondary Index Sub table
- Accessing Records via Primary Index

- Accessing records via Secondary Index
- Keys Vs Indexes
- Full Real time scenarios and explaining

### **Teradata Sql Reference**

- SQL Fundamentals
- Data Types and Literals
- Data Definition Statements(DDL)
- Data Manipulation Statements(DML)
- Explaining with proper examples

### **Teradata Functions and Operators**

- String Functions
- Format Function
- Cast Functions
- Group & Aggregate Functions
- With & with by clauses
- Practices of this section

### **Teradata Transactions**

- Joins and Unions
- Inner Join
- Left Outer Join
- Right Outer Join
- Full Outer Join
- Detailed explanation
- Join Strategies
- Product Join
- Merge Join
- Questions of this section

### **Teradata Basic Commands**

- HELP
- SHOW
- EXPLAIN
- COLLECT STATISTICS

### **Teradata Objects**

- Tables

- SET table
- Multi Set table
- Volatile tables
- Global Temporary tables
- Derived tables
- Views
- Macros
- Stored Procedures
- Triggers
- Practices and FAQs of this session

### **Teradata spaces**

- PERM space
- SPOOL space
- TEMPORARY space
- Teradata User and managing
- Practical Examples

### **Teradata Transaction Modes**

- BTET
- ANSI
- Interactive
- Batch

### **Teradata Sql Assistant (Queryman)**

- How to use Sql Assistant
- Query Processing
- Importing and exporting

### **Teradata Utilities**

#### **BTEQ**

- Teradata BTEQ
- Batch Scripts with samples
- Branching and Looping
- Importing data through scripts
- Exporting data through scripts
- Error handling
- Explanation with proper debugging

## **Fast Load**

- Teradata Fast Load
- Various Phases of Fast Load
- Advantages and Process
- Limitations of Fast Load
- Sample Scripts

## **Multi Load**

- Teradata Multi Load
- Various Phases of Multi Load
- Advantages and Process
- Limitations of Multi Load
- Working with multiple tables
- Applying various operations
- Sample Scripts

## **Fast Export**

- Teradata Fast Export
- Advantages and Process
- Limitations of Fast Export
- Sample Scripts

## **T-Pump**

- Advantages and Process
- Teradata Parallel Data Pump
- Limitations of TPump
- Overview of TPump
- Sample Scripts
- Utility Vs Parallelism
- Difference between Multi load and T pump

## **Performance Tuning**

- Performance Tuning and Explain Utility
- Explain Usage
- Collecting Statistics
- Tuning SQL Performance
- Explaining various SQL statements

## **Real time scenarios and Project Architecture**

- Retail or Banking or Health care Project Architecture
- Teradata relation with Informatica
- How to run Teradata scripts in Unix
- Sample Real time scripts walk thru.
- Interview guidance.