



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

Taradata Training Curriculum Online by Certified Consultant

Module 1: Introduction to Teradata

- Introduction to Database Management Systems (DBMS)
- What is a Data Warehouse?
- OLTP vs OLAP
- Introduction to Teradata
- History and Evolution of Teradata
- Features of Teradata
- Teradata Architecture Overview
- Shared-Nothing Architecture
- Parallel Processing (MPP)
- Teradata Components
- Teradata Terminologies
- Teradata Product Suite
- Use Cases of Teradata
- Installation Overview

Module 2: Teradata Architecture

- Parsing Engine (PE)
- BYNET
- Access Module Processor (AMP)
- Virtual Processor
- Node Architecture
- VPROC
- Storage Architecture
- Parallel Execution
- Hashing Algorithm
- Row Distribution
- Primary Index Concept
- Cylinders and Data Blocks
- Fallback Protection
- Journaling
- RAID Overview

Module 3: Teradata Database Objects



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Databases
- Users
- Tables
- Views
- Macros
- Stored Procedures
- Triggers
- Join Indexes
- Hash Indexes
- Secondary Indexes
- Global Temporary Tables
- Volatile Tables
- Queue Tables
- Error Tables

Module 4: SQL Fundamentals

- SQL Overview
- DDL Statements
- DML Statements
- DCL Statements
- TCL Statements
- SELECT
- INSERT
- UPDATE
- DELETE
- MERGE
- CREATE
- ALTER
- DROP
- RENAME
- COMMENT

Module 5: Data Types

- Character Data Types
- Numeric Data Types
- Decimal
- Integer
- ByteInt



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Float
- Date Data Type
- Time
- Timestamp
- Interval
- Period Data Types
- JSON
- XML
- CLOB
- BLOB

Module 6: SQL Queries

- WHERE Clause
- ORDER BY
- GROUP BY
- HAVING
- DISTINCT
- TOP
- SAMPLE
- QUALIFY
- CASE Statement
- Derived Tables
- Common Table Expressions (CTE)
- UNION
- UNION ALL
- INTERSECT
- MINUS

Module 7: Joins

- Inner Join
- Left Outer Join
- Right Outer Join
- Full Outer Join
- Cross Join
- Self Join
- Product Join
- Merge Join
- Nested Join
- Join Strategies



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Join Optimization

Module 8: Functions

Aggregate Functions

- COUNT
- SUM
- AVG
- MAX
- MIN

String Functions

- SUBSTRING
- TRIM
- POSITION
- REPLACE
- INDEX
- UPPER
- LOWER

Numeric Functions

- ROUND
- CEIL
- FLOOR
- MOD
- ABS
- POWER

Date Functions

- CURRENT_DATE
- CURRENT_TIMESTAMP
- ADD_MONTHS
- EXTRACT
- LAST_DAY
- NEXT_DAY

Conversion Functions

- CAST
- FORMAT
- TO_CHAR
- TO_DATE

Module 9: Window Functions



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- ROW_NUMBER
- RANK
- DENSE_RANK
- LAG
- LEAD
- FIRST_VALUE
- LAST_VALUE
- NTILE
- CUME_DIST
- PERCENT_RANK
- Running Total
- Moving Average

Module 10: Primary Indexes

- Primary Index Overview
- Unique Primary Index (UPI)
- Non-Unique Primary Index (NUPI)
- Choosing Primary Index
- Data Distribution
- Skew
- Hashing
- Performance Considerations

Module 11: Secondary Indexes

- Unique Secondary Index (USI)
- Non-Unique Secondary Index (NUSI)
- Join Index
- Hash Index
- Value Ordered Secondary Index (VOSI)
- Performance Impact
- Index Selection

Module 12: Partitioning

- Partitioned Primary Index (PPI)
- Multi-Level PPI
- Column Partitioning
- Row Partitioning



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- Benefits of Partitioning
- Partition Elimination

Module 13: Views and Macros

- Creating Views
- Updatable Views
- Security Views
- Creating Macros
- Executing Macros
- Parameterized Macros
- Macro Best Practices

Module 14: Stored Procedures

- Introduction
- Variables
- Control Statements
- IF
- CASE
- LOOP
- WHILE
- FOR
- Cursor
- Exception Handling
- Dynamic SQL
- Stored Procedure Debugging

Module 15: Transactions

- ACID Properties
- COMMIT
- ROLLBACK
- BT
- ET
- Locking
- Deadlocks
- Transaction Isolation



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

Module 16: Utilities

- FastLoad
- MultiLoad
- TPump
- FastExport
- BTEQ
- TPT (Teradata Parallel Transporter)
- ARC Utility
- SQL Assistant
- Teradata Studio

Module 17: Performance Tuning

- Explain Plan
- EXPLAIN Output Analysis
- Statistics Collection
- HELP STATISTICS
- COLLECT STATISTICS
- Optimizer Basics
- Query Tuning
- Reducing Full Table Scans
- Join Optimization
- Spool Space Optimization
- Skew Identification
- Query Banding

Module 18: Teradata Administration Basics

- User Management
- Database Space
- Perm Space
- Spool Space
- Temp Space
- Profiles
- Roles
- Privileges
- Password Policies
- Resource Management



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

Module 19: Backup and Recovery

- Fallback
- Journaling
- Archive
- Restore
- Recovery Concepts
- Disaster Recovery Basics

Module 20: Security

- Authentication
- Authorization
- Roles
- Privileges
- Row-Level Security
- Column-Level Security
- Data Encryption
- Audit Logging

Module 21: Teradata Vantage

- Introduction to Teradata Vantage
- Hybrid Multi-Cloud Platform
- Advanced Analytics
- Machine Learning Integration
- Data Lake Integration
- Cloud Deployment
- Vantage Features
- Workload Management

Module 22: ETL Integration

- Teradata with Informatica
- Teradata with DataStage
- Teradata with Talend
- Teradata with ODI
- ETL Best Practices
- Incremental Loading



info@kashatraining.com

Call: (IN) 8447799888
(US) +1 (515) 442-2418

- CDC (Change Data Capture)

Module 23: BI Integration

- Teradata with Tableau
- Teradata with Power BI
- Teradata with Qlik Sense
- Teradata with SAP BusinessObjects
- ODBC/JDBC Connectivity
- Reporting Best Practices