Greenplum Architecture, Administration, and Implementation

1. Greenplum Fundamental Concepts

- Basics of Data Warehousing
- Greenplum Concepts, Features, and Benefits
- Greenplum Architecture
  - Shared Nothing and MPP Implementation

2. Database Installation and Initialization

- Systems Preparation and Verification
- Greenplum Database Initialization

3. Greenplum Database Tools, Utilities, and Internals

- PSQL Client and Greenplum Utilities
- Greenplum Performance Monitor
- Greenplum Database Server Configuration
- Greenplum Database Internals

4. Defining and Securing the User Database

- Data Definition Language
- Data Manipulation and Data Query Language
- Roles, Privileges, and Resources

5. Data Loading and Distribution

- Data Loading
- Table Partitioning

6. Database Management and Archiving

- Managing the Greenplum Database
- Backup and Restores

7. Data Modeling and Design

- Data Modeling
- Physical Design Decisions

8. Performance Analysis and Tuning

- JOIN Tables
  - Types and Methods
- Database Tuning
- EXPLAIN Plan
  - Analyzing Queries
- Improve Performance with Statistics
- Indexing Strategies

9. Developing Reports Using Advanced SQL

- Advanced Reporting Using Online Analytic Processing (OLAP)
- PostgreSQL Functions
- Advanced SQL Topics and Performance Tips