

Course Code: K04004GW

Course Title: dashDB for Tables, Views, Advanced Queries, and Analytic Constructs

Description:

This course teaches developers, database administrators, and system programmers various features of SQL, including object creation and alteration, views, advanced queries, and analytic constructs.

Note: Guided eLearning is a self-paced offering which includes web-based content for self-study and videos (including audio) that demonstrate activities.

If you are enrolling in a Self Paced Virtual Classroom or Web Based Training course, before you enroll, please review the Self-Paced Virtual Classes and Web-Based Training Classes on our Terms and Conditions page, as well as the system requirements, to ensure that your system meets the minimum requirements for this course. <http://www.ibm.com/training/terms>

Objectives:

Please refer to courses overview

Prerequisites:

Students taking this course should have the following prerequisite skills:

- Ability to write basic SQL SELECT statements, including a SELECT list, FROM clause, WHERE clause, GROUP BY clause, HAVING clause, and ORDER BY clause.
- Ability to perform basic SQL INSERT, UPDATE, and DELETE operations.
- Ability to utilize basic SQL scalar functions, such as the DECIMAL function, and SQL column functions, such as SUM.
- Ability to write basic non-correlated subqueries.

Students may obtain these skills by taking the dashDB SQL for Basic Queries and the dashDB for Functions, Grouping, Union, Subqueries, and Updates courses, or through equivalent experience.

Duration:

8 Hrs

Topics:

1. Review of SQL

- Selecting rows and columns
- LIKE and the ESCAPE clause
- Column functions
- Summarizing group values
- Activity
- SQL challenges

2. OLAP functions

- Super groups
- GROUP BY ROLLUP
- GROUP BY CUBE
- Grouping function
- GROUP BY grouping sets
- OLAP functions for ranking
- Activity
- SQL challenges

3. Create and modify tables

- Creating tables and adding columns
- Activity

4. Constraints and indexes

- Check Constraints
- Indexes, unique, and primary keys
- Referential integrity
- Information integrity constraints
- Activity
- SQL challenges

5. Triggers

- Triggers
- More on triggers
- Activity
- SQL challenges

6. MERGE

- MERGE
- Activity

7. Views - basics

- Views
- Activity

8. Views - additional features

- INSTEAD OF triggers
- CHECK option
- View merge
- View materialization
- Activity
- SQL challenges

9. Joins

- Join (original syntax)
- Inner Join (newer syntax)
- Outer joins
- LEFT OUTER JOIN
- RIGHT OUTER JOIN
- FULL OUTER JOIN
- Anti-join
- Joins of more than two tables
- Joins and local predicates
- Activity
- SQL Challenges

10. UNION and UNION ALL

- UNION and UNION ALL
- Activity

11. EXCEPT and INTERSECT

- EXCEPT and INTERSECT
- Activity
- SQL challenges

12. CASE and CAST

- Case
- CAST
- Activity
- SQL challenges

13.

Summary (Materialized Query) Tables and Temporary Tables• Summary tables and Materialized Query Tables (MQTS)• Temporary tables• Activity

Audience:

Developers, Database Administrators, System Programmers