SQL SERVER 2012

GITS ACADEMY

SQL Server 2012

CLASS ROOM | ONLINE

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MICROSOFT SQL SERVER
QUERYING SQL SERVER 2012

COMPREHENSIVE COURSE TO PREPARE PEOPLE FOR THE EXAM-461

PREREQUISITES: BASIC COMPUTERS WORKING KNOWLEDGE OF RELATIONAL DATABASES, | **DURATION 24 HRS** | **TOOLS: MICROSOFT SQL SERVER**

ABOUT THE COURSE

This course provides students with the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server 2012. This course is the foundation for all SQL Server-related disciplines; namely, Database Administration, Database Development and Business Intelligence. This course is intended for Database Administrators, Database Developers, and Business Intelligence professionals. The course will very likely be well attended by SQL power users who aren't necessarily database-focused or plan on taking the exam; namely, report writers, business analysts and client application developers.

COURSE OUTLINE

LESSON 1 :INTRODUCTION TO SQL SERVER 2012

Introducing Microsoft SQL Server 2012
Getting Started with SQL Server Management Studio

LESSON 2 : INTRODUCTION TO T-SQL QUERYING

Introducing T-SQL
Understanding Sets
Understanding Predicate Logic
Understanding the Logical Order of Operations in SELECT statements

LESSON 3 : WRITING SELECT QUERIES

Writing Simple SELECT Statements
Eliminating Duplicates with DISTINCT
Using Column and Table Aliases
Writing Simple CASE Expressions
Writing Basic SELECT Statement

LESSON 4 : QUERYING MULTIPLE TABLES

Understanding Joins
Querying with Inner Joins
Querying with Outer Joins
Querying with Cross Joins and Self Joins

LESSON 5 : SORTING AND FILTERING DATA

Sorting Data
Filtering Data with a WHERE Clause
Filtering with the TOP and OFFSET-FETCH Options
Working with Unknown and Missing Values

LESSON 6 : WORKING WITH SQL SERVER 2012 DATA TYPES

Writing Simple SELECT Statements
Eliminating Duplicates with DISTINCT
Using Column and Table Aliases
Writing Simple CASE Expressions
Writing Basic SELECT Statement

LESSON 7: USING BUILT-IN FUNCTIONS

Writing Queries with Built-In Functions
Using Conversion Functions
Using Logical Functions
Using Functions to Work with NULL

LESSON 8 : GROUPING AND AGGREGATING DATA

Using Aggregate Functions
Using the GROUP BY Clause
Filtering Groups with HAVING

LESSON 9 : USING SUBQUERIES

Writing Self-Contained Subqueries
Writing Correlated Subqueries
Using the EXISTS Predicate with Subqueries

LESSON 10 : USING TABLE EXPRESSIONS

Using Derived Tables
Using Common Table Expressions
Using Views
Using Inline Table-Valued Functions

LESSON 11: USING SET OPERATORS

Writing Queries with the UNION Operator
Using EXCEPT and INTERSECT
Using APPLY

LESSON 12: CATEGORIES OF SQL STATEMENTS

DML (Data Manipulation Language)
DDL (Data Definition Language)
DCL (Data Control Language)
TCL (Transaction Control Language)

LESSON 12: USING WINDOW RANKING, OFFSET AND AGGREGATE FUNCTIONS

Creating Windows with OVER
Exploring Window Functions

LESSON 13 : PIVOTING AND GROUPING SETS

Writing Queries with PIVOT and UNPIVOT
Working with Grouping Sets

LESSON 14 : QUERYING SQL SERVER METADATA

Querying System Catalog Views and Functions.
Executing System Stored Procedures.
Querying Dynamic Management Objects.

LESSON 15 : EXECUTING STORED PROCEDURES

Querying Data with Stored Procedures
Passing Parameters to Stored Procedures
Creating Simple Stored Procedures
Working with Dynamic SQL

LESSON 16: PROGRAMMING WITH T-SQL

T-SQL Programming Elements
Controlling Program Flow

LESSON 17: IMPLEMENTING ERROR HANDLING

Using TRY / CATCH Blocks
Working with Error Information

LESSON 18: IMPROVING QUERY PERFORMANCE

Factors in Query Performance
Displaying Query Performance Data.

WHO SHOULD LEARN THIS COURSE?

Students, working professionals who want to learn SQL programming for developing applications using databases, or for extracting and analyzing database contents.
No previous SQL experience is required.

WHAT IS THE KEY LEARNING OUTCOMES OF THIS COURSE?

At the end of the training the participants would learn/use/acquire the following techniques/knowledge:
• Describe the basic architecture and concepts of Microsoft SQL Server 2014.
Understand the similarities and differences between Transact-SQL and other computer languages.
Write SELECT queries
Query multiple tables
Sort and filter data
Describe the use of data types in SQL Server
Modify data using Transact-SQL
Use built-in functions
Group and aggregate data
Use subqueries
Use table expressions
Use set operators
Use window ranking, offset and aggregate functions
Implement pivoting and grouping sets
Execute stored procedures
Program with T-SQL
Implement error handling
Implement transactions

WHAT IS THE SCOPE OF LEARNING?

Write SQL code based on ANSI/ISO standards to build Microsoft SQL Server or Oracle database structures.
Update database content with SQL and transaction handling.
Retrieve data with filter conditions and from multiple tables using various types of joins.
Process data with row and aggregate functions.
Manipulate data with correlated and non correlated subqueries.

WHAT IS THE TRAINING METHODOLOGY OF GITS ACADEMY?

• The training delivery would be case based instructor lead training.
• Each training day the participants learn the SQL topics and would solve cases.

Student's Speak

I Am in the Business Stats and R class at GITS Academy. It's really good. Trainer explains very well. Even as a beginner and Non-Engineering, Non-Programming person, I understand it very well. I even used some of this in my project. Work. Thanks GITS Team, Thanks Ashutosh as my trainer!

Namrata Kumar

I joined GITS ACADEMY, it was a good experience all together,...for people like non technical would also find the vey simple by the methods of Pankaj sir...thank you one and all.

Aman Mehta

I was enrolled here. and I must say am happy that, I took a decision of getting training from GITS Academy. So I took data analytics in R. And this field is so vast. I am getting so many calls for jobs after getting trained.
I would strongly recommend GITS Academy to you all.

Jyothi N

Best Part about the Hadoop and SAS Course in GITS Academy malleswaram is "Variety of problems with real world use cases were covered" , Kudos! to GITS , They have the Best Training Staff and Quality of learning,I would recommend people to join GITS Malleswaram for best Output.

Ajith V

Courses Offered by GITS Academy

Business Analytics

- Advanced Excel
- VBA/ Macros
- SAS Base/ Advanced Data Science Professional
- Predictive Modelling
- SQL Server/ MSBI
- Big Data Analytics/Hadoop
- Data science using Python

Data Visualization

- QlikView
- Tableau
- MS Power BI
- SpotFire

Other Courses

- Project Management
- Information Technology
- Soft Skills
- Data Base

Our Clients

Training Locations

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