

Introduction to SQL on Oracle Database

Database menjadi bagian sangat penting pada perusahaan, dimana setiap aktivitas kegiatan yang dilakukan semua tersimpan kedalam database yang terintegrasi. Database Oracle mendominasi industri perbankan dan perusahaan-perusahaan besar. Sepuluh bank top dunia menggunakan database Oracle untuk melakukan bisnis mereka. Mereka menyediakan kombinasi tinggi tingkat teknologi dan solusi bisnis yang terintegrasi. Database oracle dapat menyimpan data dalam jumlah yang sangat besar dan memiliki ketahanan serta security internal di dalamnya.

Trainer: Agus Sulaiman, S. Kom, MM

WAKTU PELAKSANAAN

08 Januari 2027

09:00 - 17:00 WIB

TEMPAT PELATIHAN

Location: Kuretakeso Hotel - Kemang / Best Western Premier - Cawang / The Aryaduta Hotel Semanggi

Harga

Group Price: Rp 3.550.000
Full Fare: Rp 3.950.000

**) Harga di atas tidak dikenakan PPN 11%, sudah termasuk makan siang, snack, sertifikat, dan modul.*

Keuntungan lain yang tidak kalah penting yang ditawarkan oleh database Oracle adalah kehandalan mereka. Oracle adalah database yang memberikan kinerja yang sangat baik ketika ditantang dengan tugas-tugas berat. Seperti Tes ASAM (Association for Standardization of Automation and Measuring Systems), yang merupakan alat penting yang digunakan untuk memastikan integritas data yang tersimpan. Tes ini penting karena dapat diandalkan penyimpanan data adalah tujuan utama dari database. Dengan demikian, database Oracle telah terbukti memberikan integritas yang tinggi penyimpanan data.

Pelatihan ini bertujuan agar peserta mendapatkan dasar-dasar pengetahuan tentang oracle database pemahaman teknis yang lebih mendalam tentang relational database management system (ORDBMS). Peserta juga dapat bekerja dalam lingkungan SQL *Plus untuk mengeksekusi

statement SQL dan untuk tujuan *formatting* dan *reporting* data mentah basis data.

OBJECTIVES

Setelah mengikuti pelatihan ini peserta diharapkan mampu untuk :

1. Mengenal lingkungan databae oracle.
2. Dapat menggunakan statement DDL,DML didalam database oracle.
3. Dapat melakukan query dasar dan advanced ke dalam database oracle.
4. Dapat menggunakan fungsi konversi dan ekspresi kondisi.
5. Dapat menggunakan subqueries untuk memecahkan masalah yang kompleks.
6. Dapat menampilkan laporan data dari hasil fungsi grup.

SYLLABUS

- **Introducing Database Oracle**
  - Overview oracle database
  - Certification track
  - Communicating with a RDBMS Using SQL
  - Sql Statement

- **Using DDL Statements to Create and Manage Tables**
  - Database Objects
  - Naming Rules
  - CREATE TABLE Statement
  - Data Types
  - Including Constraints
  - NOT NULL Constraint
  - UNIQUE Constraint
  - PRIMARY KEY Constraint
  - FOREIGN KEY Constraint: Keywords
  - CHECK Constraint
  - ALTER TABLE Statement
  - Read-Only Tables
  - Dropping a Table

- **Manipulating Data**
  - Data Manipulation Language
  - Adding a New Row to a Table
  - INSERT Statement Syntax
  - Changing Data in a Table
  - UPDATE Statement Syntax
  - Removing a Row from a Table

- DELETE Statement
- TRUNCATE Statement
- Advantages of COMMIT and ROLLBACK Statements

- **Retrieving Data Using the SQL SELECT Statement**
  - Capabilities of SQL SELECT Statements
  - Basic SELECT Statement
  - Selecting All Columns
  - Selecting Specific Columns
  - Writing SQL Statements
  - Arithmetic Expressions
  - Using Arithmetic Operators
  - Defining a Null Value
  - Null Values in Arithmetic Expressions
  - Defining a Column Alias
  - Using Column Aliases
  - Concatenation Operator
  - Literal Character Strings
  - Using Literal Character Strings
  - Duplicate Rows
  - Displaying the Table Structure
  - Using the DESCRIBE Command

- **Restricting and Sorting Data**
  - Limiting Rows Using a Selection
  - Limiting the Rows That Are Selected
  - Using the WHERE Clause
  - Character Strings and Dates
  - Comparison Operators
  - Range Conditions Using the BETWEEN Operator
  - Membership Condition Using the IN Operator
  - Pattern Matching Using the LIKE Operator
  - Combining Wildcard Characters
  - Using the NULL Conditions
  - Defining Conditions Using the Logical Operators
  - Using the AND, OR, NOT Operator
  - Rules of Precedence
  - Using the ORDER BY Clause
  - Sorting

- **Using Single-Row Functions to Customize Output**

- SQL Functions
- Two Types of SQL Functions
- Single-Row Functions
- Character Functions
- Case-Conversion Functions
- Character-Manipulation Functions
- Number Functions
- Using the ROUND, TRUNC, MOD Function
- \Working with Dates
- RR Date Format
- Using the SYSDATE Function
- Arithmetic with Dates
- Using Arithmetic Operators with Dates
- Date-Manipulation Functions
- Using Date Functions
- Using ROUND and TRUNC Functions with Dates

- **Using Conversion Functions and Conditional Expressions**
  - Conversion Functions
  - Implicit and Explicit Data Type Conversion
  - Using the TO_CHAR Function with Dates
  - Elements of the Date Format Model
  - Using the TO_CHAR Function with Dates
  - Using the TO_CHAR Function with Numbers
  - Using the TO_NUMBER and TO_DATE Functions
  - Nesting Functions
  - General Functions
  - NVL Function
  - Conditional Expressions
  - CASE Expression
  - Using the CASE Expression
  - DECODE Function
  - Using the DECODE Function

- **Displaying Data from Multiple Tables**
  - Obtaining Data from Multiple Tables
  - Types of Joins
  - Qualifying Ambiguous Column Names
  - Creating Natural Joins
  - Creating Joins with the USING Clause

- Joining Column Names
- Retrieving Records with the USING Clause
- Using Table Aliases with the USING Clause
- Creating Joins with the ON Clause
- Retrieving Records with the ON Clause
- Joining a Table to Itself
- Self-Joins Using the ON Clause
- INNER Versus OUTER Joins
- LEFT OUTER JOIN
- RIGHT OUTER JOIN
- FULL OUTER JOIN
- Cartesian Products

- **Reporting Aggregated Data Using the Group Functions**
  - What Are Group Functions
  - Types of Group Functions
  - Group Functions: Syntax
  - Using the AVG, SUM, MIN, MAX, COUNT Functions
  - Using the DISTINCT Keyword
  - Group Functions and Null Values
  - Creating Groups of Data
  - Creating Groups of Data: GROUP BY Clause Syntax
  - Using the GROUP BY Clause
  - Grouping by More than One Column
  - Using the GROUP BY Clause on Multiple Columns
  - Illegal Queries Using Group Functions
  - Restricting Group Results
  - Restricting Group Results with the HAVING Clause
  - Using the HAVING Clause

- **Using Subqueries to Solve Queries**
  - Using a Subquery to Solve a Problem
  - Subquery Syntax
  - Types of Subqueries
  - Single-Row Subqueries
  - Executing Single-Row Subqueries
  - Using Group Functions in a Subquery
  - The HAVING Clause with Subqueries
  - Multiple-Row Subqueries
  - Null Values in a Subquery

- **Using the Set Operators**
  - Set Operators
  - UNION Operator
  - UNION ALL Operator
  - INTERSECT Operator
  - MINUS Operator
  - Matching the SELECT Statements
  - Using the ORDER BY Clause in Set Operations

AUDIENCE TARGET (Intermediate Level)

- IT/ Technical Staff :
  - Software Developer / Programmer, Software Consultant, System Analyst, System Administrator, Database Administrator.
- High School Graduate

TRAINING METHOD :

- 25% Theory
- 75% Practices (Case study).
- Dynamic and interactive training presentation

Instruktur Pelatihan

Agus Sulaiman, S. Kom, MM

Praktisi trainer yang mempunyai pengalaman lebih dari 10 tahun menjadi lecture/ instructor / trainer/ Software developer di beberapa lembaga pelatihan swasta, instansi pemerintah / swasta di Jakarta, mulai tahun 2003 – 2019, antara lain di Universitas Multimedia Nusantara, Universitas Bina Nusantara, Universitas Bunda Mulia, Institut Bisnis dan Informatika Indonesia, Binus Center, Smart Learning, Xsis Mitra Utama, Cyber Campus, SKA.

Pernah menjabat sebagai Head of IT Software developer department di perusahaan swasta dan perusahaan jasa konsultan. Sekarang beliau aktif sebagai pengajar di beberapa kampus, memberikan pelatihan di perusahaan provider training and consulting dan bekerja dalam dunia IT Software developer ERP (Enterprise Resource planning) system dengan produk yang dihasilkan dengan nama ISA (Integrated System Apllication).

Selain tema pelatihan tersebut di atas, beliau juga memberikan pelatihan IT sebagai berikut :

- Step by step menjadi programmer handal dengan tools .Net Developer.
- Powerfull Database Programming with ADO.NET.
- Step By Step Membuat Laporan dengan Crystal Report.
- Fundamental Programming with C / C++.
- Fundamental Programming with VB.Net.
- Fundamental Programming with Java.
- Fundamental programming with python.
- Mobile Apps with Android Programming.
- Mobile Apps Advanced with Android Programming.
- Web Programming with PHP and Database Mysql.
- Web Design with HTML, CSS, JQUERY and Bootstrap.
- Web Programming with ASP.Net and Database SQL Server.
- Programming N-Tier with ASP.Net and Database SQL Server.
- ASP.Net with MVC and Database SQL Server.
- C# Programming with Visual Studio and Database.
- VB.Net Programming with Visual Studio and Database.
- Java Programming with NetBeans and Database Mysql.
- Database Application with Microsoft Access.
- Database Programming T-SQL with Microsoft SQL Server.
- Database Administrator with Microsoft SQL Server.
- Database SQL Server SSIS (SQL Server Integration Service).
- Introduction to SQL on Oracle 10g /11g Database.
- Programming with PL/SQL on Oracle 10g/11g Database.
- Build Internet Applications with Oracle 10g Forms.
- Build Reports with Oracle 10g Reports.
- Oracle Database Security.

CONTACT US

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