

Oracle Basics For JEE Abridged

Lesson 00:

People matter, results count.



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Document History

Date	Course	Software Version	Developer / SME	Change Record Remarks
	Version No.	No.		
13-Nov-08	1	9i	Rajita Dhumal	Content Creation
14-Nov-08	1.1	9i	CLS team	Review
14-Jan-10	1.2	9i	Anu Mitra	Review
14-Jan-10	1.2	9i	Rajita Dhumal, CLS Team	Incorporating Review comments
25-Apr-11	2	9i	Anu Mitra	Integration refinements
17-May-13	2.1	9i	Hareshkumar Chandiramani	Courseware refinements
21-Apr-15	2.2	9i	Kavita Arora	Courseware refinements

Course Goals and Non Goals

- Course Goals
 - To understand basic DBMS, and use SQL commands.
- Course Non Goals
 - Nothing Specific.



Pre-requisites

- A proficiency level in familiarity with Windows.

Intended Audience

- Software Programmers
- Software Analysts



Day Wise Schedule

- Day 1

- Lesson 1: Introduction to Database
- Lesson 2: Basics of SQL
- Lesson 3: Data Query Language
- Lesson 4: Aggregate (Group) Functions
- Lesson 5: SQL (Single-row) functions
- Lesson 6: Joins

- Day 2

- Lesson 6: (contd) Sub-queries
- Lesson 7: Database Objects
- Lesson 8: Data Manipulation Language
- Lesson 9: Transaction Control Language

Day Wise Schedule

- Day 3
 - PL SQL

Table of Contents

- Lesson 1: Getting Started with Database
 - 1.1: Introduction to Database
 - 1.2: Characteristics of DBMS
 - 1.3: Data models
 - 1.4: Relational DBMS
 - 1.5: Database Administrator
- Lesson 2: Basics of SQL
 - 2.1. The SQL Language
 - 2.2. Rules for SQL Statements
 - 2.3. Standard SQL Statement Groups
 - 2.4: Logging to Oracle Server

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- Lesson 3: Data Query Language
 - 3.1: The SELECT statement
 - 3.2: The WHERE and AS clauses
 - 3.3: Mathematical ,Comparison and Logical operators
 - 3.4: The DISTINCT clause
 - 3.5: The ORDER BY clause
 - 3.6: Tips and Tricks in SELECT Statements
- Lesson 4: Aggregate (Group) functions
 - 4.1: The Group function
 - 4.2: GROUP BY & HAVING clause
 - 4.3: Examples of GROUP BY and HAVING clauses

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- Lesson 5: SQL (Single-row) functions
 - 5.1: SQL functions
 - 5.2: Number functions
 - 5.3: Character functions
 - 5.4: Date functions
 - 5.5: Conversion functions
 - 5.6: Miscellaneous functions
 - 5.7: Tips and Tricks
- Lesson 6: Joins and Sub-queries
 - 6.1: Joins
 - 6.1.1: Oracle Proprietary Joins

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- Lesson 6: Joins and Sub-queries (continued)
 - 6.2: Sub-query
 - 6.3: Tips and Tricks
- Lesson 7: Database Objects
 - 7.1: Basic Data Types
 - 7.2: Data Integrity
 - 7.3: Examples of CREATE TABLE
 - 7.4: Examples of ALTER TABLE
 - 7.5: Database Objects
 - 7.6: Index
 - 7.7: 7.9: View
 - 7.10: Deleting Database Objects
 - 7.11: Tips and Tricks

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- Lesson 8: Data Manipulation Language
 - 8.1: Adding Data
 - 8.2: Removing Data
 - 8.3: Modifying Data

- Lesson 9: Transaction Control Language
 - 9.1: Introduction to Transactions
 - 9.2: Statement Execution and Transaction Control
 - 9.3 Commit Transactions
 - 9.4 Rollback Transactions

References

- RDBMS Concepts - A Primer
 - <http://safari.oreilly.com>
- Introduction to Database Systems; by C.J.Date
- Relational Database Theory; by Atzeni, De Antonellis



Next Step Courses (if applicable)

- Oracle PL/SQL

Other Parallel Technology Areas

- MS-Access
- SQL Server
- DB2