Oracle Basics
Lesson 00: (DBMS/SQL)

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People matter, results count.

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Document History

Date	Course Version No.	Software Version No.	Developer / SME	Change Record Remarks
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

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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.

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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

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Day Wise Schedule

- Day 3
  - Lesson 8: Data Manipulation Language
  - Lesson 9: Transaction Control Language
  - Start with PL SQL

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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
    - 6.1.2: SQL: 1999 Compliant 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: Synonym
  - 7.8: Sequence
  - 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
  - 9.5 Savepoints in 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

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Next Step Courses (if applicable)

- Oracle PL/SQL

Other Parallel Technology Areas

- MS-Access
- SQL Server
- DB2