SQL Oracle 11G Introduction

Course Content

LESSON 1

- What is a database?
- What is a table?
- Rows and columns
- Connect to the server
- Change databases
- Simple select
- Select all columns from a table
- Select specific columns from a table
- Concatenate two columns
- Create a select statement that will give a formatted output.

LESSON 2

- Add a single where clause to our base select statement
- Add a second clause using an and
- Add a second clause using an or
- What is the difference between the two?
- SQL statement with multiple and/or conditions
- Grouping and / or conditions
- Using >, <, <=, >= in where clause
- Range output (in, between)
- Wildcards and like (discussion of case sensitivity)
- Not operator

LESSON 3

- Null values
- Order by
- Group by
- Distinct
- Aggregates (count, sum, average)
- Aggregating with group by clauses
- Having
- Compute
- Union

LESSON 4

- Overview of primary keys
- Joining tables
- Sub selects
- Advantages and disadvantages of each
- Aliases
- Exists

LESSON 5

- Creating tables
- Naming conventions
- Types of data
- Data types
- User defined data types
- Specifying nulls
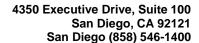- Identity properties
- Creating a simple table

LESSON 6

- Temporary tables
- Explicit create
- Create using select into
- Views
- Creating views with options
- Restrictions on a view
- Get information on a view

LESSON 7

- Using declarative RI
- Defaults
- Check constraints
- Indexes
- Indexes and keys
- Table storage
- Creating indexes with constraints
- Declarative RI constraints
- Column level vs. tables level constraints
- Restrictions on modifications
- Adding messages to constraints
- Altering a table

LESSON 8

- Data integrity with defaults
- Creating and binding a default
- Data integrity with rules
- Definition of a rule
- Creating and binding a rule
- Rules, defaults, and user defined data types
- Precedence
- Getting information about rules and defaults
- Unique indexes

LESSON 9

- Insert data
- Update data
- Delete data

LESSON 10

- Oracle functions
- String functions
- Date functions
- Numeric functions

LESSON 11

- Basic PL/SQL
- Triggers defined
- Why use a trigger
- Roles of triggers
- When does a trigger fire