

# PeopleTools 8.57-8.58 Oracle SQL for PeopleSoft PeopleTools SQR

## Training Agenda

## Oracle SQL: 2.5 Day Course

### Retrieving Data using the SQL SELECT Statement

- Capabilities of the SELECT statement
- Arithmetic expressions and NULL values in the SELECT statement
- Column aliases. Use of concatenation operator, literal character strings, alternate quote operator, and the DISTINCT keyword
- Use of the DESCRIBE, DEFINE, VERIFY
- Limiting the Rows and Rules of precedence for operators in an expression
- Substitution Variables

### Reporting Aggregated Data Using the Group Functions

- Group Functions
- Creating Groups of Data
- Restricting Group Results

### Joins and Subqueries

- Typical PeopleSoft Joins ("Old Style" Joins)
- ANSI Joins: Natural join, Self-join, Non equijoins, OUTER join
- Converting between old style and ANSI joins
- Introduction to Subqueries
- Single Row Subqueries
- Multiple Row Subqueries

### Using Single-Row Functions to Customize Output

- Describe the differences between single row and multiple row functions
- Manipulate strings with character function in the SELECT and WHERE clauses
- Manipulate numbers with the ROUND, TRUNC and MOD functions
- Perform arithmetic with date data
- Manipulate dates with the date functions

### Using the SET Operators

- Set Operators
- UNION and UNION ALL operator
- INTERSECT operator
- MINUS operator
- Matching the SELECT statements
- Using ORDER BY clause in set operations

### Oracle SQL Tuning Basics

- Explain Plans
- Understanding Indexes
- Common errors which impact performance
- Tips and Tricks -- using 'IN' vs. '=', etc.
- Working with large datasets

## Abstracting Your Queries

- Using the WITH clause in SQL
- Using "in line" Views

## Advanced Reporting

- SQL analytical functions concepts: AVG, MIN, MAX, SUM using Partition Over()
- LEAD,LAG,RANK, and DENSE\_RANK

## Introduction to Data

### Dictionary Views

- Introduction to Data Dictionary
- Describe the Data Dictionary Structure
- Using the Data Dictionary views
- Querying the Data Dictionary Views

## SQR: 1.0 Day Course

- ✓ Understanding and troubleshooting existing programs
- ✓ Be able to customize existing delivered and custom modules
- ✓ Learn core differences and similarities between SQR and other languages

### SQR Program Overview

- The SQR language
- SQR Programs: Typical Flow and Sections
- Common SQR Functions
- Lookup Tables
- Special Focus: Print Command

### SQL Handling In SQR

- SQL Paragraphs and Error Conditions
- Static and Dynamic SQL
- Features of begin-select columns

### Process Scheduler and SQR

- About process request API
- Typical run control page design
- Component, Process Security

### SQC Files – Libraries for SQR

- Reading SQC Files
- Using SQC Procedures

### Custom Procedures and Functions

- Global versus Local Variables
- Implementing Functions
- Procedures which return User Input

### Dynamic SQL, Creating Reports, Other Features

- Multiple Reports
  - Layouts
  - Headings and Footings
- SQR Reserved Words
- Pre-Compiler Directives
- Debugging SQL Programs
  - DISPLAY and SHOW Statements
  - Using Debug flags
- Development Tips and Techniques

### Optional: Working with External Data

- Opening and Closing Files
- Writing and Reading Lines