

# Fundamentals of SQL Using Oracle: Level 1

What You Will Learn.....	1
Understanding SQL and Relational Databases .....	2
Understanding SQL Commands .....	3
Getting Started with SQL Developer.....	4
Rules for Using the SQL Worksheet .....	5
Selecting Records.....	7
Writing <b>select</b> Statements .....	7
Understanding Oracle Datatypes .....	9
Using Column Aliases .....	10
Concatenating Columns .....	11
Accessing Tables in Another Schema.....	12
Working with Numeric Data.....	13
Using the DUAL Table to Test Arithmetic Operations .....	15
Understanding the Order of Operations .....	16
Exercise 1: Selecting Data and Working with Developer .....	17
Sorting Data and Selecting Specific Records .....	20
Sorting Data Using the order by Clause .....	20
Searching for Specific Records Using the <b>where</b> Clause.....	22
Exercise 2: Sorting Data and Selecting Specific Records .....	26
Creating More Complex Queries .....	30
Combining Search Criteria .....	30
Combining <b>and</b> and <b>or</b> Operators.....	33
Using the <b>like</b> Operator with Wildcards.....	34
Searching for NULL Values .....	36
Exercise 3: Writing More Complex Queries .....	37
Creating Tables and Inserting Records.....	40
Creating a Table Using the <b>create table</b> Command.....	40
Understanding Oracle's Datatypes .....	42
Looking up Table Information.....	44
Adding Records to a Table .....	45
Copying One Table from Another Table .....	48
Assigning Default Values .....	49
Creating Temporary Tables (Optional).....	50
Adding Comments .....	51

Deleting, Truncating, and Renaming Tables .....	52
Dropping Tables.....	52
Truncating Tables .....	53
Renaming Tables .....	53
Exercise 4: Creating Tables and Inserting Records .....	54
Updating Records.....	58
Updating Multiple Columns .....	59
Updating to a Default Value .....	59
Updating Data Using a Calculation .....	59
Deleting Records.....	60
Controlling Transactions.....	61
Starting a New Transaction.....	61
Committing Database Changes.....	62
Reversing Database Changes.....	63
Creating Savepoints .....	64
Exercise 5: Updating and Deleting Records .....	66
Summary Exercise .....	70
Appendix A: Chart of Commands .....	72
Appendix B: Fads Through the Decades Museum .....	74
Class Tables .....	74
Copying Class Tables for Future Practice .....	75
Appendix C: SQL*Plus Commands and SQL Developer .....	76
Appendix D: Using the SQL Developer Interface with Oracle .....	77
Sorting and Filtering Data in the Table Pane.....	77
Using the Query Builder to Create Select Statements .....	79
Creating or Populating a Table .....	81
Adding Comments .....	82
Updating Tables through the Table Pane.....	84
Deleting Records Using the Table Pane .....	84
Appendix E: Solutions to Exercises.....	85