Contents

Overview

Objectives

The objectives of this lab are:

- Write SELECT statements to access **data from more than one table** using equality and inequality joins
- View data that generally does not meet a join condition by using **outer joins**.
- Join a table to itself using a **self-join**.
- Use SQL*Plus to format a report

Prerequisites

☐ 1. Read Chapter 2, pages 45-61.

☐ 2. Work your way through the examples on pages 45-61.

- You do not have the Store schema tables installed in your schema. The Store schema tables are available in the **STOREDB** schema.
- To use the Store Schema tables in your textbook examples, you need to put **STOREDB.** (dot) in front of the table names. For example, to run the command in the middle of page 34 you would write:

```
SELECT price * 2 DOUBLE_PRICE
FROM storedb.products;
```

Note the "storedb" can be either upper or lower case.

- Versions of Oracle prior to 9i use the ANSI **SQL/86** standard. Oracle 9i implemented the ANSI **SQL/92** standard which introduced new standards for joining tables.

Demo Due Date:

For all sections, the **lab demo** is due in 1 week (Feb 07-11) by the end of your lab session.

Scoring:

Lab is worth **14** marks.

Part 1: Writing Multiple Table Queries

☐ 3. As per Lab01, create a Lab03 folder.

4. For the following, you will need to use the Human Resource tables you created in Lab01. These questions do not use the **STOREDB** tables used in the textbook examples, only the tables you installed from Lab01 (e.g. the **Employees** table). Don't forget to use the DESC statement to view the structure (the column names) of a table. For example, use **DESC Employees** to view the structure of the **Employees** table. The appendix contains an ER diagram of the Human Resource tables.

☐ 4. The file **Lab03 Questions.sql** has 14 questions in it. Download this to your lab03 folder. Each query is worth 1 mark. For this lab you will be required to answer some of the questions using the ANSI **SQL/86** standards and the ANSI **SQL/92** standards.

☐ 5. After you have created the SQL query for each question, add that SQL under the question in the file.

Demo

Note: Be sure to use proper formatting in your SQL statements. The **SELECT** should be on one line, the **FROM** on another line and so on. Each clause should start a new line. You will lose marks if you do not use proper formatting with your SQL statements!

6. Demo to the instructor that your script executes successfully in SQL*Plus. ***(14 marks)***

Appendix

Human Resource Entity Relationship Diagram

- Column names high-lighted in yellow are the Primary Key.
- >---- Represents a 1 to many relationship. For example, the location_id in the LOCATIONS table could appear many time in the location_id of the DEPARTMENTS table. Try running the following query and you can see that the same location_id appears multiple times.

```
SELECT location_id FROM departments ORDER BY location_id;
```