COSC 344 Lab for Week 6

Overview

The purpose of this lab is to get you familiar with Oracle's SQL commands.

Before your lab time, write out the queries stated in next section.

Executing Queries

Below is a set of seven query statements. The numbering of the queries continues from the last lab. Work out the SQL query to get the desired results. The correct results are shown in the section "Query Results", at the end of this document so you can check your queries. If you get stuck, ask for help in lab.

[Important] Put each query in a separate file called q##.sql where ## is the query number.

18. Using a correlated subquery, list the names and numbers of all salespeople with more than one customer.

19. Using a correlated subquery that correlates the orders table with itself, list the orders with above average amounts for the particular customer. Look at the output to help understand what is desired.

| 21. | First type the following lines to add two rows into the database: | | | | | |
|-----|--|--|--|--|--|--|
| | <pre>INSERT INTO department VALUES ('TempDept', 6, 123456789, TO_DATE('18-Jul-2002', 'DD-MON-YYYY')); INSERT INTO project VALUES ('TempProject', 50, 'Houston', 6);</pre> | | | | | |
| | Now use a UNION to list all project numbers of projects that involve Smith as either a worker or as a manager of the department that controls the project. HINT: Union two queries: one that retrieves projects that involve Smith as a worker; one that retrieves projects that involve Smith as manager of the department that controls the project. | | | | | |
| | | | | | | |

20. Use a correlated subquery and EXISTS to find the employees who have no dependents.

22. Give everybody except Borg (he makes too much anyway ③) a 10% pay raise. After you do this, select lname, salary to verify it worked properly. If not, reload the company script and try again.

23. Create a new table like the employee table that has only the workers who live in Houston. Create the table with the appropriate columns and data type and populate it using a single SQL command. After the table is created, do a

to verify your results.

24. Create a new table called emp_dep. Its attributes consist of the first and last name of employees, and the names, sex and birthdates of the employees dependents. Create this table in a single SQL statement by selecting appropriate data from existing tables. After the table is created, do a

to verify your results.

Query Results

18. 1001 Peel 1002 Serres

20. Alicia Zelaya Ramesh Narayan Joyce English Ahmad Jabbar James Borg

21. 1

2 50

| 22. | Smith | 33000 |
|-----|---------|-------|
| | Wong | 44000 |
| | Zelaya | 27500 |
| | Wallace | 47300 |
| | Narayan | 41800 |
| | English | 27500 |
| | Jabbar | 27500 |
| | Borg | 55000 |

23. Your result should include only Smith, Wong, English, Jabbar and Borg. Otherwise it should look like the *employee* table. The value of the salary attribute will depend upon whether you have reloaded the tables after giving the 10% pay raise.

| 24. | Franklin | Wong | Alice | | F | 05-APR-86 |
|-----|----------|---------|----------|--------|-------------|-------------|
| | Franklin | Wong | Theodore | M 25 | - 00 | T-83 |
| | Franklin | Wong | Joy | F 03 | -MA | Y-58 |
| | Jennifer | Wallace | Abner | | M | 28-FEB-42 |
| | John | Smith | Mich | nael | M | 04-JAN-88 |
| | John | Smith | Alio | ce | | F 30-DEC-88 |
| | John | Smith | Eliz | zabeth | F | 05-MAY-67 |

Assessment: 14 marks

Query 18 to Query 24 will be assessed.

If you saved the statement for each query in a separated file named "q##.sql", you can use the following command to concatenate the 7 queries into one file:

This lab will be assessed in the labs in Week 7. When the lab demonstrator approaches you to mark this lab, show him the Lab6.sql file, and execute the queries by loading Lab6.sql. The lab demonstrator will check the correctness of each query.