COMP810 Data Warehousing and Big Data

Lab – Week 2 (Data Warehousing) Due: ---

Employing SQL developer, by the end of this lab you will be able to:

(a) Limit the rows retrieved in a query,
(b) Use substitutions variables , and
(c) Sort tuples as required by the user.

Task 1. Use the HR (from last week) database to create the following queries. Save your code in a .sql file.

1. Generate a report to display staff full names (i.e., concatenating both first and last names), commission, and job IDs of employees who earn a commission of more than 25% (0.25).

2. Generate a a report to display staff full names (i.e., concatenating both first and last names), job IDs and salary for all employees whose salary falls in the range of $7,000 to $9,000.

3. Regarding Question 2, modify your query to display full names, job IDs and salary for any employee whose salary is **NOT** in the range of $7,000 to $9,000.

4. Create a report to display the full name, job id, and hiring date of employees whose last name is either 'Atkinson' or 'Greenberg'.

5. Create a report to display street address, postal code, and city name of all offices in Brazil and the United Kingdom.

6. Create a report to display first name, last name, and contact details (email and phone combined and displayed as **Contact Details**) of all employees who were hired in **(a)** August 2002 and **(b)** January 1996. **The output should be sorted in the ascending order of employee first name.**

7. Modify the report you created in question 7 to display all employees (combine first and last names and rename the column as **Full Name**) and contact details (email and phone combined and displayed as **Contact Details**) who were hired after December 1999. **Sort the results in descending order of hire date within each Job title.**

8. List all employees whose first name starts with the letter 'S' and ends with the letter 'n'?

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9. List the details (first name, last name, and job) of all employees who hold the following job ids (AC_MGR, AD_VP, FI_MGR, HR_REP, PR_REP)?

10. **REPORTING ALL EMPLOYEES WORKING IN A SPECIFIC DEPARTMENT.**

Create a report that prompts the user for a department ID, and then displays the employee ID, last name, salary, and department for that department's employees. Run the report for four different department numbers. How many rows did you get for each department?

Task 2. The database schema of the Hotel database (Week 1 DW) is in Figure 1.

Hotel	(hotelno, hotelName, city)
Room	(roomNo, hotelNo, type, price)
Booking	(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest	(guestNo, guestName, GuestAddress, guestCity)

Where

Hotel contains hotel details and hotelNo is the primary key;

Room contain room details for each hotel and (roomNo, hotelNo) forms the primary key;

Booking contains details of bookings and (hotelNo, guestNo, dateFrom) forms the primary key;

Guest contains guest details and guestNo is primary key.

Figure 1: HR database schema

- List full details of all rooms with a price above $40.00 per night, in ascending order of price.
- List the names and addresses of all guests in Auckland, alphabetically ordered by name.

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