

## COMP810 – Data Warehousing and Big Data

### Lab 2: Restricting and sorting of output

After completing this lesson, you should be able to do the following:

- Limit the rows that are retrieved by a query
- Sort the rows that are retrieved by a query
- Use ampersand substitution in SQL\*Plus to restrict and sort output at run time

**Task 1:** Use the HR database to create the following queries. Save your queries in a file (week2.sql) in a folder on your home drive.

- 1- Generate a report to display staff full names and job titles of employees who earn \$10,000 or more.
- 2- Modify the previous report to display full names, job titles and salary for any employee whose salary is not in the range of \$5,000 to \$12,000.
- 3- Create a report to display the full name, job Title, and start working date for the following staff members:
  - Miss Hutton, Alyssa
  - Mr Austin, David
- 4- Create a report to display address, postal code and city for all offices that are located in Italy and Japan.
- 5- Create a report to show staff full names in addition to contact details (email, phone numbers) for all employees who were hired in January 1996. Display the names in alphabetical order by last name. Format the report according to the example below. (Hint: to identify the date format for your session use the following query ***select sysdate from dual***).

Full Name	Contact Details
Steven King	Phone: 515.123.4567 Email: SKING
Neena Kochhar	Phone: 515.123.4568 Email: NKOCHHAR
Lex De Haan	Phone: 515.123.4569 Email: LDEHAAN

- 6- Examine Oracle online documentation to explain the keywords ***sysdate*** and ***dual*** that you used in the previous question.
- 7- Modify the report you created in question 5 to display all the employees who were hired after December 1999, display the results in descending order by hire date.

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- 8- List all staff members who're their first name starts with the letter (S) and ends with the letter (n)?
- 9- List the employees who hold the following job titles (AC\_MGR, AD\_VP, FI\_MGR, HR\_REP, PR\_REP)?
- 10- Modify the previous report to list the employees who do not hold the following job titles (AC\_MGR, AD\_VP, FI\_MGR, HR\_REP, PR\_REP)?
- 11- The HR department wants to run reports based on a specific manager. Create a dynamic report that prompts the user for a manager ID and generates the employee ID, last name, salary, and department for that manager's employees.

**Task 2:** You should have created the Hotel Database tables in Week 1. If not, copy the script Hotel\_DB.sql from AUTOnline - Course Notes\Labs\Week1\ Hotel\_DB.sql to a folder on your home drive and follow the instructions given in Week 1 Lab exercise. The database schema is printed below for reference.

<b>Hotel</b>	( <u>hotelNo</u> , hotelName, city)
<b>Room</b>	( <u>roomNo</u> , <u>hotelNo</u> , type, price)
<b>Booking</b>	( <u>hotelNo</u> , <u>guestNo</u> , <u>dateFrom</u> , dateTo, roomNo)
<b>Guest</b>	( <u>guestNo</u> , 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.

- 1- List full details for all rooms with a price above \$40 in ascending order by room type and price
- 2- List the names and full addresses of all guests who live in AUT accommodation at “8 Mount St.”