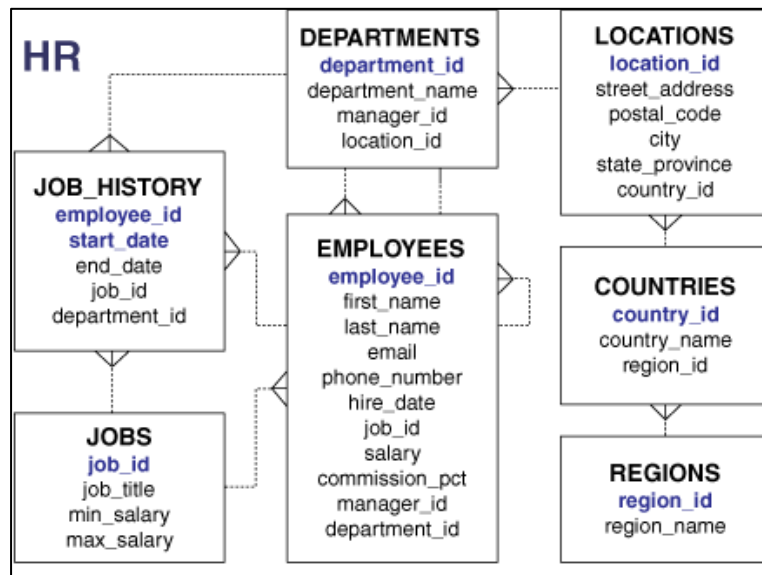


COMP810 – Data Warehousing and Big Data

Lab 1: Writing Basic SQL Statements

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

- Execute a basic SQL Select statement
- Run SQL queries with “concatenation” option
- Create reports with customized column titles
- Limiting output results using “where” clause



Task 1

Download script “HR_DB.sql” and execute it¹. This will create and populate HR database. Explore the data and tables using **SQL Select** statement and the **describe** command. Construct SQL statements to answer the following queries. Save your queries in a file (week1.sql) in a folder on your home drive.

1. Select all data from the **LOCATIONS** table to display its internal structure i.e. attributes names and datatypes.
2. Show the internal structure of the **EMPLOYEES** table. Create a report to display employee number, employee full name (first and last names), job title and the department number for each employee. Rename the columns headings to: **Emp#**, **Full Name**, **Job Title** and **Department ID**, respectively.
3. Write a query to display a unique list job titles from the **EMPLOYEES** table.
4. Create a report to display employees full name “concatenated”, with their emails and phone numbers according to the format below.

¹ The procedure to run a script file in SQLDeveloper is stated in “account_setup.pdf” under the announcements page.

COMP810 – Data Warehousing and Big Data

Lab 1: Writing Basic SQL Statements

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Task 2

Download script “Hotel_DB.sql” and execute it. This will create and populate Hotel database. Using the Hotel database write SQL statements to answer the following queries. Save your queries in a file (week1.sql) in a folder on your home drive:

Hotel	(<u>hotelNo</u> , hotelName, city)
Room	(<u>roomNo</u> , <u>hotelNo</u> , type, price)
Booking	(<u>hotelNo</u> , <u>guestNo</u> , <u>dateFrom</u> , dateTo, roomNo)
Guest	(<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. Create a report to display a list of all hotels with details of hotel name and location.
2. Create a report lists full details of all guests.
3. Create a report to display the room number and price of all “Standard” rooms.
4. Create a report to display name and address details for all guests who live in London.
5. Create a report to list all bookings for which no dateTo has been specified.