IS251 - LAB#0 Activities

DQL

In this lab, you are going to practice and write different DQL queries. Before starting, you need to install Oracle Human Resources (HR) Dataset which is a sample data based provided by Oracle for learning purposes.

HR Dataset Description

In the Human Resource (HR) records, each employee has an identification number, e-mail address, job identification code, salary, and manager. Some employees earn commissions in addition to their salary.

The company also tracks information about jobs within the organization. Each job has an identification code, job title, and a minimum and maximum salary range for the job. Some employees have been with the company for a long time and have held different positions within the company. When an employee resigns, the duration the employee was working, the job identification number, and the department are recorded.

The sample company is regionally diverse, so it tracks the locations of its warehouses and departments. Each employee is assigned to a department, and each department is identified either by a unique department number or a short name. Each department is associated with one location, and each location has a full address that includes the street name, postal code, city, state or province, and the country code.

In places where the departments and warehouses are located, the company records details such as the country name, currency symbol, currency name, and the region where the country is located geographically.
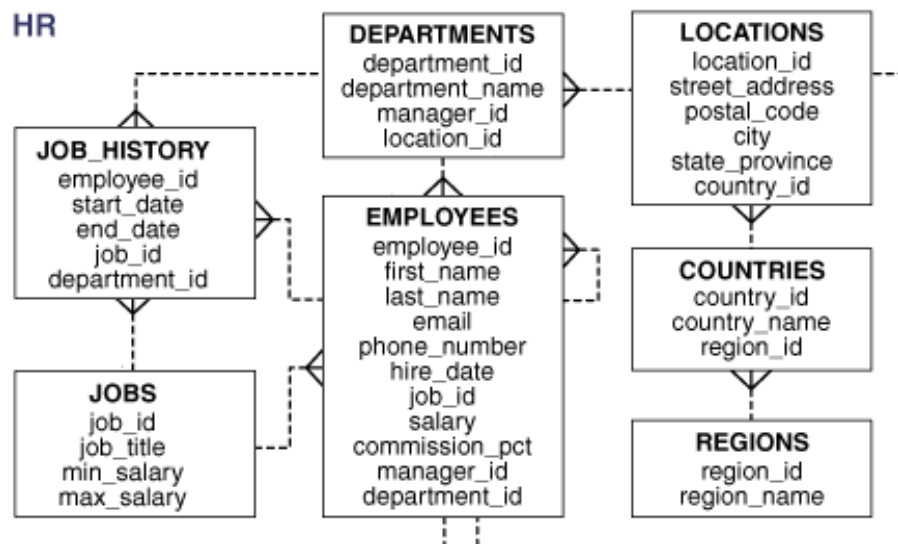
HR Dataset Installation steps:

1. In Oracle Application Express, log in to your workspace.
2. Click on SQL workshop
3. Click on Utilities
4. Click on Sample dataset
5. Find the HR Data > click Install

6. Click on Next >> Install Dataset

7. Take few minutes to explore the HR tables description and data to familiarize yourself with the dataset. (SQL workshop > Object Browser)

DQL Activities:

1. Retrieve all information of the employee(s) whose first name is "Steven".

2. Retrieve all information of the employee(s) whose full name is "Steven King".

3. Retrieve first name, last name, job ID and salary of the employee(s) whose salary is greater than or equal to 15000 and less than or equal to 20000. order the result based on salary ascendingly.

4. Retrieve the full name, salary, and hire date of the employee(s) whose salary is greater than or equal to 1000. Sort the results according to the salary from high to low and then according to the hire date from the oldest to the newest.

5. Retrieve all the different values of salaries paid in the organization ordered from the higher salary value to the lower salary value.

6. Retrieve the id number of the accounting department.

7. Retrieve the employees' information of those who work in the department 110.

8. Retrieve the employees' information of those who work in the accounting department.

9. Retrieve full name, salary, job ID, hire date and commission value only for the employee(s) who earn a commission.

10. Retrieve full name, salary, job ID, hire date and commission for all employees who do not earn a commission.

11. Retrieve full name, salary, job ID, department id of the employee(s) who do not work in any of these departments: 'FI_MGR', 'AD_PRES', 'SA_MAN', 'AC_MGR'

12. Retrieve all information of employees who work in the accounting or Executive departments.

13. Retrieve full name, salary, job ID of the employee(s) whose first name starts with D and ends with d.

14. Retrieve the department ID, department name, and the total number of employees in each department.

15. What is the average salary in this company .