SQL Subqueries Project

https://github.com/camit001

Guided : SQL Subqueries

- In this guided project, we explore how to retrieve and manipulate data using SQL subqueries. We cover subqueries in WHERE, FROM, and SELECT clauses, with practical exercises.

Task One: Getting Started

- Retrieve data from all tables in the 'employees' database.
- Tables: employees, departments, dept_emp, dept_manager, salaries, customers, sales.

Task Two: Subqueries in WHERE Clause

- Use subqueries to filter data in the WHERE clause.
- - 2.1: Retrieve a list of all employees that are not managers.
- - 2.2: Retrieve all columns in the sales table for customers above 60 years old.
- - 2.3: Retrieve a list of all manager's employees number, first and last names returns all the data from the dept_manager table.
- - 2.4: Retrieve a list of all managers that were employed between 1st January, 1990 and 1st January, 1995.

Task Three: Subqueries in FROM Clause

- Use subqueries in the FROM clause to filter or transform intermediate results.
- - 3.1: Retrieve a list of all customers living in the southern region.
- - 3.2: Retrieve a list of managers and their department names.
- - 3.3: Retrieve a list of managers, their first, last, and their department names returns data from the employees table.

Task Four: Subqueries in SELECT Clause

- Use subqueries to calculate values for each row in the SELECT clause.
- - 4.1: Retrieve the first name, last name and average salary of all employees.
- - 4.2: Retrieve a list of customer_id, product_id, order_line and the name of the customer returns data from the sales and customers tables.

Task Five: Subquery Exercises - Part 1

- - 5.1: Return a list of all employees who are in Customer Service department returns data from the dept_emp and departments tables.
- - 5.2: Include the employee number, first and last names.
- - 5.3: Retrieve a list of all managers who became managers after the 1st of January, 1985 and are in the Finance or HR department.
- - 5.4: Retrieve a list of all employees that earn above 120,000 and are in the Finance or HR departments.
- - 5.5: Retrieve the average salary of these employees.

Task Six: Subquery Exercises - Part 2

- - 6.1: Return a list of all employees number, first and last name. Also, return the average salary of all the employees and average salary of each employee.
- - 6.2: Find the difference between an employee's average salary and the average salary of all employees.
- - 6.3: Find the difference between the maximum salary of employees in the Finance or HR department and the maximum salary of all employees.

Task Seven: Subquery Exercises - Part 3

- - 7.1: Retrieve the salary that occurred the most.
- - 7.2: Find the average salary excluding the highest and the lowest salaries.
- - 7.3: Retrieve a list of customers id, name that has bought the most from the store.
- - 7.4: Retrieve a list of the customer name and segment of those customers that bought the most from the store and had the highest total sales.

THANK YOU FOR YOUR ATTENTION

- Want to explore the project further?
- Visit our GitHub repository for the full code and documentation.
- Access SQL queries, datasets, and project details.
- We welcome your contributions and feedback!

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