

SQL Task

Task 1: Create a table named Employee Details with the following 10 columns and use suitable constraint for every column:

- **EmployeeID (Serial)**
- **FirstName (VARCHAR, maximum 50 characters)**
- **LastName (VARCHAR, maximum 50 characters)**
- **Email (VARCHAR, maximum 100 characters)**
- **PhoneNumber (VARCHAR, maximum 15 characters)**
- **HireDate (DATE)**
- **Salary (DECIMAL, with precision 10 and scale 2)**
- **DepartmentID (Integer)**
- **IsActive (BOOLEAN)**
- **JobTitle (VARCHAR, maximum 100 characters)**

Task 2: Insert data into the Employee_Details Table

1. Insert at least **5 rows** of data into the **Employee_Details** table created in Task 1.
2. Use meaningful data for each column, making sure the EmployeeID is unique, Salary is realistic, and the HireDate is in a valid date format.
3. Write the SQL queries to insert the data.

Task 3: Insert Data from a CSV File into the SQL Table

1. Insert data from a CSV file into the existing **Employee_Details** table that you created in Task 1.

Task 4: Update the Employee_Details Table

1. Update the EmployeeDetails table by setting the DepartmentID to 0 for all employees where IsActive is set to False.

Task 5: Update the Employee_Details Table - Salary Increment

1. Increase the Salary by 8% for employees who meet the following conditions:
 - IsActive = False
 - DepartmentID = 0
 - JobTitle is one of the following:

1. HR Manager 2. Financial Analyst 3. Business Analyst 4. Data Analyst

Task 6: Query to Find Employees with Custom Column Names

1. Retrieve the FirstName and LastName of employees whose Salary is between 30,000 and 50,000 and display the results as Name (for FirstName) and Surname (for LastName).

Task 7: Query to Find Employees Whose FirstName Starts with 'A'

1. Retrieve all data from the Employee_Details table where the FirstName starts with the letter 'A'.

Task 8: Delete Rows with EmployeeID from 1 to 5

1. Delete the rows from the Employee_Details table where the EmployeeID is between 1 and 5.

Task 9: Rename Table and Columns

1. Change the name of the table and specific column names in the existing database structure to enhance clarity.

Instructions:

1. **Rename the table** from Employee_Details to employee_database.
2. **Rename the columns** as follows:
 - Change FirstName to Name.
 - Change LastName to Surname.

Task 10: Add State Column and Update Data in PostgreSQL

1. Enhance the employee_database table by adding a new column for State and populating it based on the IsActive status of employees.

Instructions

1. **Add a new column** named State with the following specifications:
 - Data type: VARCHAR
 - Constraint: NOT NULL
2. **Update the State column** with the following conditions:
 - Set State to 'India' for all employees where IsActive is TRUE.
 - Set State to 'USA' for all employees where IsActive is FALSE.