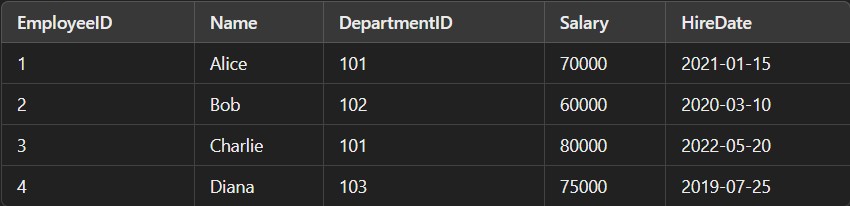
SQLite3 Exercises

**Scenario: Employee Management System**

A company maintains a database with two tables:

* **Employees**: Stores information about employees.



* **Departments: Stores information about departments.**

**Questions**



**Q1. Write a query to list the names of employees hired after January 1, 2021.**

SELECT name

FROM Employees

WHERE hire\_date > '2021-01-01';

**Q2. Write a query to calculate the average salary of employees in each department.**

SELECT d.department\_name, AVG(e.salary) AS average\_salary

FROM Employees e

JOIN Departments d ON e.department\_id = d.department\_id

GROUP BY d.department\_name;

**Q3. Write a query to find the department name where the total salary is the highest.**

SELECT d.department\_name

FROM Employees e

JOIN Departments d ON e.department\_id = d.department\_id

GROUP BY d.department\_name

ORDER BY SUM(e.salary) DESC

LIMIT 1;

**Q4. Write a query to list all departments that currently have no employees assigned.**

SELECT department\_name

FROM Departments d

LEFT JOIN Employees e ON d.department\_id = e.department\_id

WHERE e.department\_id IS NULL;

**Q5. Write a query to fetch all employee details along with their department names.**

SELECT e.\*, d.department\_name

FROM Employees e

JOIN Departments d ON e.department\_id = d.department\_id;