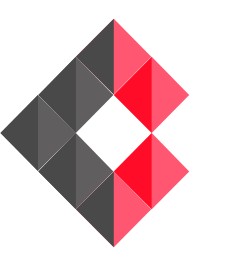
**Internship Task** - **RDBMS and SQL Task #4**

SQL case-based assignment with a scenario and 10 queries for an **HR Management Application**.

# Scenario

You are managing a database for an HR management system. The system tracks employees, their departments, salaries, and performance reviews. The database includes the following tables:

1. **Employees** o EmployeeID (Primary Key)
   * FirstName o LastName o Email o Phone o HireDate
   * DepartmentID (Foreign Key) o ManagerID (Foreign Key, referencing EmployeeID) o Salary
2. **Departments** o DepartmentID (Primary Key) o DepartmentName
   * ManagerID (Foreign Key, referencing EmployeeID)
3. **PerformanceReviews** o ReviewID (Primary Key) o EmployeeID (Foreign Key)



* + ReviewDate
  + PerformanceScore (e.g., 'Excellent', 'Good', 'Average', 'Poor') o Comments

1. **Payroll** o PayrollID (Primary Key) o EmployeeID (Foreign Key) o PaymentDate
   * Amount
   * PaymentMethod (e.g., 'Bank Transfer', 'Check')

# Assignment Queries

1. **Retrieve the names and contact details of employees hired after January 1, 2023.**

**Ans :**

SELECT employee.FirstName, employee.LastName, employee.Email, employee.Phone

FROM Employees employee

WHERE employee.HireDate > '2023-01-01';

1. **Find the total payroll amount paid to each department.**

**Ans :**

SELECT department.DepartmentName, SUM(payroll.Amount) AS TotalPayroll

FROM Payroll payroll

JOIN Employees employee ON payroll.EmployeeID = employee.EmployeeID

JOIN Departments department ON employee.DepartmentID = department.DepartmentID

GROUP BY department.DepartmentName;

1. **List all employees who have not been assigned a manager.**

**Ans :**

SELECT employee.FirstName, employee.LastName

FROM Employees employee

WHERE employee.ManagerID IS NULL;

1. **Retrieve the highest salary in each department along with the employee’s name.**

**Ans :**

SELECT department.DepartmentName, employee.FirstName, employee.LastName, MAX(employee.Salary) AS HighestSalary

FROM Employees employee

JOIN Departments department ON employee.DepartmentID = department.DepartmentID

GROUP BY department.DepartmentName;

1. **Find the most recent performance review for each employee.**

**Ans:**

SELECT employee.FirstName, employee.LastName, MAX(review.ReviewDate) AS MostRecentReviewDate

FROM Employees employee

LEFT JOIN PerformanceReviews review ON employee.EmployeeID = review.EmployeeID

GROUP BY employee.EmployeeID, employee.FirstName, employee.LastName;

1. **Count the number of employees in each department.**

**Ans :**

SELECT department.DepartmentName, COUNT(employee.EmployeeID) AS NumberOfEmployees

FROM Employees employee

JOIN Departments department ON employee.DepartmentID = department.DepartmentID

GROUP BY department.DepartmentName;

1. **List all employees who have received a performance score of "Excellent." Identify the most frequently used payment method in payroll.**

**Ans :**

SELECT employee.FirstName, employee.LastName

FROM Employees employee

JOIN PerformanceReviews review ON employee.EmployeeID = review.EmployeeID

WHERE review.PerformanceScore = 'Excellent';

1. **Retrieve the top 5 highest-paid employees along with their departments.**

**Ans :**

SELECT PaymentMethod, COUNT(\*) AS PaymentCount

FROM Payroll

GROUP BY PaymentMethod

ORDER BY PaymentCount DESC

LIMIT 1;

1. **Show details of all employees who report directly to a specific manager (e.g., ManagerID = 101).**

**Ans :**

SELECT employee.FirstName, employee.LastName, employee.Salary, department.DepartmentName

FROM Employees employee

JOIN Departments department ON employee.DepartmentID = department.DepartmentID

ORDER BY employee.Salary DESC

LIMIT 5;