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)
   o `FirstName`
   o `LastName`
   o `Email`
   o `Phone`
   o `HireDate`
   o `DepartmentID` (Foreign Key)
   o `ManagerID` (Foreign Key, referencing EmployeeID)
   o `Salary`
2. **Departments**
   o `DepartmentID` (Primary Key)
   o `DepartmentName`
   o `ManagerID` (Foreign Key, referencing EmployeeID)
3. **PerformanceReviews**
   o `ReviewID` (Primary Key)
   o `EmployeeID` (Foreign Key)
   o `ReviewDate`
   o `PerformanceScore` (e.g., 'Excellent', 'Good', 'Average', 'Poor')
   o `Comments`
4. **Payroll**
   o `PayrollID` (Primary Key)
   o `EmployeeID` (Foreign Key)
   o `PaymentDate`
   o `Amount`
   o `PaymentMethod` (e.g., 'Bank Transfer', 'Check')

Assignment Queries

1. Retrieve the names and contact details of employees hired after January 1, 2023.
2. Find the total payroll amount paid to each department.
3. List all employees who have not been assigned a manager.
4. Retrieve the highest salary in each department along with the employee's name.
5. Find the most recent performance review for each employee.
6. Count the number of employees in each department.
7. List all employees who have received a performance score of "Excellent." Identify the most frequently used payment method in payroll.
8. Retrieve the top 5 highest-paid employees along with their departments.
9. Show details of all employees who report directly to a specific manager (e.g., ManagerID = 101).