

Cognizant SQL Interview — Set 2 (Medium to Hard Level)

Question 1: Find Employees with the Same Salary

Table: `Employee`

| EmpID | EmpName | Department | Salary |
|-------|---------|------------|--------|
| 1 | Rahul | IT | 60000 |
| 2 | Priya | HR | 75000 |
| 3 | Aman | IT | 60000 |
| 4 | Neha | Finance | 90000 |

✓ Finds salaries shared by more than one employee.

Question 2: Retrieve the 3rd Highest Salary Using Window Function

Table: `Employee`

✓ Uses `DENSE_RANK()` to handle duplicate salaries.

Question 3: List All Employees Who Work in Departments Having More Than 2 Employees

Table: `Employee`

✓ Subquery filters departments with `>2` employees.

Question 4: Retrieve Employees Who Have Not Been Assigned Any Project

Tables:

Employee(EmpID, EmpName)

Project(ProjectID, EmpID, ProjectName)

Sample Data:

Employee

| EmpID | EmpName |
|-------|---------|
|-------|---------|

| | |
|---|-------|
| 1 | Rahul |
|---|-------|

| | |
|---|-------|
| 2 | Priya |
|---|-------|

| | |
|---|------|
| 3 | Aman |
|---|------|

Project

| ProjectID | EmpID | ProjectName |
|-----------|-------|-------------|
|-----------|-------|-------------|

| | | |
|-----|---|-------|
| P01 | 1 | Alpha |
|-----|---|-------|

| | | |
|-----|---|------|
| P02 | 3 | Beta |
|-----|---|------|

✓ Shows employees without any linked project.

Question 5: Find Department-Wise Highest Salary Using Window Function

Table: Employee (with Department, Salary)

✓ Finds top earners per department.

Question 6: Display Customers Who Spent More Than the Average Purchase Amount

Table: Orders

| OrderID | CustomerID | Amount |
|---------|------------|--------|
| 101 | C01 | 1200 |
| 102 | C02 | 3000 |
| 103 | C01 | 1800 |
| 104 | C03 | 1000 |

✔ *Compares total spent per customer against average order amount.*

Question 7: Get Employee Details Along with Their Manager Names

Table: **Employee**

| EmpID | EmpName | ManagerID |
|-------|---------|-----------|
| 1 | Rahul | NULL |
| 2 | Priya | 1 |
| 3 | Aman | 1 |
| 4 | Neha | 2 |

✔ *Self-join to display reporting hierarchy.*

Question 8: Find Employees Whose Salary Is Greater Than Their Department's Average

Table: **Employee**

✔ *Compares each employee's salary with the departmental average.*

Question 9: Retrieve Top 2 Highest Paid Employees from Each Department

Table: Employee

✓ Displays the top two earners per department.

Question 10: Find Departments That Have Never Had an Employee

Tables:

Department(DeptID, DeptName)

Employee(EmpID, EmpName, DeptID)

Sample Data:

Department

| DeptID | DeptName |
|--------|----------|
|--------|----------|

| | |
|----|----|
| D1 | IT |
|----|----|

| | |
|----|----|
| D2 | HR |
|----|----|

| | |
|----|---------|
| D3 | Finance |
|----|---------|

Employee

| EmpID | EmpName | DeptID |
|-------|---------|--------|
|-------|---------|--------|

| | | |
|---|-------|----|
| 1 | Rahul | D1 |
|---|-------|----|

| | | |
|---|-------|----|
| 2 | Priya | D2 |
|---|-------|----|

Query:

✓ Finds departments with no employees.
