

SQL Preparation Questions - Cognizant Technical Assessment

Level 1 – Medium (Cognizant assessment typical)

- 1 Write a query to display the second highest salary in the Employee table.
- 2 Find employees who don't have a manager (manager_id IS NULL).
- 3 List departments that have more than 5 employees.
- 4 Display the highest paid employee in each department.
- 5 Find all employees who joined in the last 2 years.
- 6 Retrieve employees who are working on more than 2 projects.
- 7 Display employees whose salary is greater than the average salary of their department.

Level 2 – Hard (Cognizant + Competitive screening)

- 1 Write a query to display the 3rd highest salary without using LIMIT or TOP.
- 2 Find the employees who are not working on any project.
- 3 Retrieve the department with the maximum total salary expenditure.
- 4 Display employees along with their manager's name (Self Join).
- 5 List projects that have no employees assigned.
- 6 Find employees who are working on all projects of their department.
- 7 Write a query to display employees who earn a salary higher than their manager.
- 8 Get the top 2 employees by salary in each department (use ROW_NUMBER or RANK).

Level 3 – Very Hard (Exam-Proof)

- 1 Retrieve the employees who are assigned to at least one project in every department.
- 2 Find employees who have the maximum number of projects across the whole company.
- 3 Write a query to display the department name, employee name, and total hours worked by employees on projects, sorted by total hours (desc).
- 4 List employees who are not assigned to their own department's projects.
- 5 Write a query to show the cumulative salary of employees in each department ordered by hire_date (use SUM() OVER).
- 6 Display the employees who joined before their manager.
- 7 Write a query to list the common employees working in more than one department (if possible via project association).
- 8 Find the highest paid employee per department, but exclude the overall company highest-paid employee.
- 9 Write a query to list the departments where every employee earns more than 50,000.
- 10 Find the average salary difference between employees and their managers.