

# SQL Interview Practice Problems

## Basic SELECT & Filtering

1. Select all columns from the Employees table.
2. Find all employees whose salary is greater than 50000.
3. Select only the first and last names of employees.
4. Find employees born after 1990.
5. Return unique job titles from the Jobs table.
6. Select employees whose last name starts with 'S'.

## WHERE & Logical Filters

7. List employees where salary is between 30000 and 60000.
8. Find employees in department 10 or department 20.
9. Employees whose email is NOT null.
10. Show employees whose first name contains 'an'.
11. Find employees not from city 'Mumbai'.

## ORDER BY & LIMIT

12. Select all employees, order by salary descending.
13. Return top 5 employees with the highest bonuses.
14. Order customers by join date (oldest first).

## Aggregations (GROUP BY & HAVING)

15. Find the total salary paid in each department.
16. Show the average salary by job title.
17. Count employees in each city.
18. Departments that have more than 10 employees.
19. Find maximum, minimum, and average age per department.

## JOIN Problems

20. Show employee name and department name.
21. List orders with customer names.
22. List products and supplier names.
23. Show employees and their manager's name.
24. Customers who placed orders.
25. Customers with or without orders.

## Subqueries

- 26. Employees earning more than average salary.
- 27. Second highest salary.
- 28. Customers without orders.
- 29. Orders greater than average amount.

## Set Operators

- 30. Vendors in Region A but not B.
- 31. Distinct job titles from two tables.

## String & Date Functions

- 32. Capitalize first letter of names.
- 33. Extract year from hire date.
- 34. Extract email domain.
- 35. Orders in last 30 days.
- 36. Orders per month.
- 37. Employees hired in last year.

## Window Functions

- 38. Rank employees by salary.
- 39. Cumulative sales per month.
- 40. Average and total sales per salesman.

## Advanced Problems

- 41. Third highest salary without window functions.
- 42. Products that never sold.
- 43. Customers spending over 1000.
- 44. Compare salary with department average.
- 45. Salary difference per department.

## Prepared for SQL Interview Practice

Practice these problems regularly to master SQL concepts.

Good Luck! ■