SQL PRACTICE QUESTIONS — JOIN, GROUP BY, AND SUBQUERY

JOIN + GROUP BY (Intermediate Level)

1. Find total salary per department.

2. Retrieve department name and total employees per department.

3. List departments with average salary greater than 5000.

4. Show department names where total salary exceeds 30000.

5. Find each manager's name and total salary of their team.

6. Retrieve job titles and average salaries using JOIN between EMP and JOB tables.

7. Display department names along with their highest-paid employee.

8. List all employees with their department and manager names.

9. Retrieve the number of employees per location.

10. Show department names having more than 5 employees.

11. Display total salary by job type across departments.

12. Retrieve all employees working in departments located in 'NEW YORK'.

13. List department names with both male and female employees.

14. Retrieve average salary per department with department names.

15. Display departments and count of employees earning above 10000.

16. Find department name and average commission for salespeople.

17. Retrieve department name and manager for each department.

18. List managers who manage more than 3 employees.

19. Find departments where no employees have commission.

20. Display total salary for each department and location.

JOIN + GROUP BY (Advanced Level)

1. Retrieve department names where the average salary is above the global average.

2. Find departments where no employee earns below 3000.

3. List top 3 departments by total salary using JOIN and GROUP BY.

4. Display departments having both CLERK and MANAGER employees.

5. Retrieve departments where the difference between max and min salary exceeds 5000.

6. Find employees whose salary is above department average using GROUP BY subquery.

7. List all departments and their total commission amount.

8. Retrieve departments with at least one employee hired after 2010.

9. Find each manager's total team salary and average team salary.

10. List all departments where max salary > company average salary.

11. Retrieve departments having more than 2 job categories.

12. List top earning employee in each department using GROUP BY.

13. Retrieve departments with total salary above twice the minimum salary in the company.

14. Display department with least total salary using GROUP BY.

15. Find department where average salary is same as company average.

16. Retrieve number of unique job titles per department.

17. Display departments with no employees using LEFT JOIN.

18. Find location with maximum total salary using JOIN and GROUP BY.

19. Retrieve total and average salary of all employees grouped by location.

20. Find employees in departments where average salary > global average.

JOIN + SUBQUERY (Intermediate Level)

1. Retrieve employees whose salary is greater than average salary of their department.

2. Find departments where total salary is above company-wide average salary.

3. List employees who earn more than highest-paid employee in department 20.

4. Retrieve employees whose salary is greater than their manager's salary.

5. Find department names where employee count is below company average.

6. List employees who earn more than average of their job title.

7. Retrieve employees who work in departments where total salary > 50000.

8. Find departments that have at least one employee earning more than 15000.

9. Retrieve employees whose department has fewer than 3 employees.

10. Display department names where max salary > average salary of all employees.

11. List employees who earn more than average salary of department 10.

12. Retrieve employees whose department average salary is greater than 9000.

13. Find managers who manage employees earning above 15000.

14. Retrieve employees whose salary is not the maximum within their department.

15. Display department names where total salary > average of all department totals.

16. Retrieve employees who earn above top 10% salary using subquery.

17. Find employees who earn more than average of top 3 salaries.

18. List departments with no employees using LEFT JOIN and subquery.

19. Retrieve employees who earn more than average salary in their location.

20. Display employees who earn above company median salary.

JOIN + SUBQUERY (Advanced Level)

1. Retrieve departments where average salary exceeds company average using subquery.

2. Find employees earning more than their department's second-highest salary.

3. List departments having employees hired before company's oldest employee.

4. Retrieve employees with salaries greater than sum of min salaries of each department.

5. Display employees working in departments with below-average total salary.

6. Find managers managing teams whose average salary > 8000.

7. Retrieve departments having at least one employee earning above twice the company average.

8. Find employees whose salary is higher than average of top 10 salaries.

9. List departments where total commission > average commission of all departments.

10. Retrieve departments with total salary less than 60% of company total salary.

11. Find employees earning above their location's average salary.

12. Retrieve departments where no employee earns more than 10000.

13. Display top 5 departments by average salary using subquery.

14. Retrieve departments having only one employee.

15. Find employees working in departments with total salary > 70000.

16. List employees earning above twice the department average.

17. Find managers with maximum team salary using subquery.

18. Retrieve employees whose department average > global average.

19. List departments whose headcount > average headcount of all departments.

20. Retrieve employees earning below department median salary.

SUBQUERY + GROUP BY (Intermediate Level)

1. Retrieve departments where average salary exceeds global average salary.

2. Find employees whose salary is greater than department average excluding themselves.

3. List departments where highest salary is more than twice average salary.

4. Retrieve employees earning between 2nd and 3rd highest salaries.

5. Find departments with fewer than 5 employees and total salary > 20000.

6. Display employees in departments with below-average headcount.

7. Retrieve employees in departments having max salary > 10000 but not top earner.

8. Find employees whose salary is above 75th percentile.

9. List departments with both male and female employees.

10. Retrieve departments whose total salary > average of all department totals.

11. Find departments with no employees.

12. Display employees earning more than sum of department minimum salaries.

13. Retrieve departments with highest average salary.

14. Find employees whose salary equals department's second-highest salary.

15. List departments where average commission > average salary / 5.

16. Retrieve employees hired in months with highest total salary.

17. Find employees whose hire year's average salary > global average salary.

18. Display departments where employee count equals minimum across departments.

19. Retrieve employees whose salary is above department's median salary.

20. Find departments where total salary is less than 75% of company total.

SUBQUERY + GROUP BY (Advanced Level)

1. Retrieve departments with total salary below global median.

2. Find employees earning above average of departments with >10 employees.

3. Retrieve departments where max salary < global average.

4. Find employees whose salary equals average of top 3 earners in company.

5. Retrieve departments with salary deviation greater than 4000.

6. Find departments where total commission exceeds 20% of total salary.

7. Retrieve departments with more than 3 managers.

8. Find employees whose salary > twice the company average.

9. Retrieve departments with highest-to-lowest salary ratio > 3.

10. Display employees in departments where min salary < company average / 3.

11. Find departments whose total salary equals average of top 5 department totals.

12. Retrieve employees with salaries higher than 90th percentile.

13. Find departments with employee count less than department 10.

14. Retrieve departments whose total salary matches department with ID 20.

15. Find employees earning equal to average of department's min and max salary.

16. Retrieve employees whose department total salary < company average total.

17. Find departments where salary spread > 8000.

18. Retrieve departments where top salary is within top 10% of company.

19. Find employees earning within ±10% of department average salary.

20. Retrieve departments where total salary is half of company total salary.