**Assignment 3 DQL**

WHERE Clause (Basic Filtering)

1. List all employees working in department ID 3.

2. Show details of employees who joined after '2023-01-01'.

3. Find employees with salary greater than 60000.

4. Show employees who do not have any department assigned.

5. Find employees who report to ManagerID 101.

DISTINCT Clause

6. List all distinct department IDs from Employee table.

7. Show distinct salaries from the Employee table.

8. List all unique ManagerIDs assigned to employees.

9. Display all distinct locations from the Department table.

10. Show distinct join dates from the Employee table.

Logical Operators (AND, OR, NOT)

11. Show employees who work in department 2 and earn more than 55000.

12. List employees who joined in 2023 or earn less than 50000.

13. Show employees who do not belong to department 1.

14. Find employees who joined after '2023-01-01' and have salary < 60000.

15. Show employees whose department is 3 or 4 and salary is greater than 60000.

Arithmetic Operators

16. Display each employee’s salary increased by 10%.

17. Show salary after 2000 deduction for all employees.

18. List employees with bonus = salary \* 0.2.

19. Find employees whose salary + 5000 is more than 60000.

20. Show employee names and their yearly salary (monthly salary \* 12).

Aggregate Functions

21. Find the total salary paid to all employees.

22. Count the number of employees in department 3.

23. Find average salary of employees in department 1.

24. Show minimum and maximum salary among all employees.

25. Find the number of employees without department (DepartmentID IS NULL).

IN Operator

26. List employees working in departments 1, 2, and 5.

27. Show employees with EmployeeID IN (101, 105, 110).

28. Show departments located in ('Delhi', 'Mumbai', 'Chennai').

29. Find employees whose ManagerID is in (101, 102, 103).

30. Display employees who joined in months with join date in ('2023-03-21', '2023-04-18').

BETWEEN Operator

31. Show employees with salary between 50000 and 60000.

32. List employees who joined between '2023-01-01' and '2023-12-31'.

33. Display departments with DepartmentID between 2 and 4.

34. Show employees whose EmployeeID is between 110 and 120.

35. Find employees whose salary + 1000 lies between 60000 and 70000.

LIKE Operator

36. Find employees whose name starts with 'A'.

37. Show employees whose name ends with 'a'.

38. List employees whose name contains 'an'.

39. Find employees whose name has second character as 'h'.

40. Display employees whose name starts with any 4-letter word followed by 'a'.

ORDER BY Clause

41. Show all employees ordered by salary in ascending order.

42. List employees ordered by JoinDate descending.

43. Show departments ordered by DepartmentName alphabetically.

44. Display employees ordered by department and salary.

45. List employees ordered by salary descending and then by name ascending.

Mixed Concepts

46. Find employees from department 3 with salary > average salary of all employees.

47. List names of employees with salary > 50000 and name contains 'a'

48. Show count of employees for each department using GROUP BY.

49. Find top 5 highest paid employees using ORDER BY and LIMIT.

50. List employees who joined in 2023, belong to department 4 or 5, and earn less than 50000.