**Solved 50+ SQL queries.**

**1.Display all records from the Employees table**

SELECT \* FROM Employees;

**2.Find the names and salaries of employees**

SELECT Name, Salary FROM Employees;

**3.Find employees who work in the “HR” department**

SELECT \* FROM Employees WHERE Department = 'HR';

**3.Retrieve employees earning more than 50,000**

SELECT \* FROM Employees WHERE Salary > 50000;

**4.Retrieve employees hired after 2022**

SELECT \* FROM Employees WHERE HireDate > '2022-01-01';

**6. Display unique department names**

SELECT DISTINCT Department FROM Employees;

**7.Count total number of employees**

SELECT COUNT(\*) AS Total\_Employees FROM Employees;

**8. Find the average salary of all employees**

SELECT AVG(Salary) AS Avg\_Salary FROM Employees;

**9. Find the highest and lowest salary**

SELECT MAX(Salary) AS Highest, MIN(Salary) AS Lowest FROM Employees;

**10. Find employees with no manager assigned**

SELECT \* FROM Employees WHERE ManagerID IS NULL;

**11. Find employees who have “John” in their name**

SELECT \* FROM Employees WHERE Name LIKE '%John%';

**12. Sort employees by salary (highest first)**

SELECT \* FROM Employees ORDER BY Salary DESC;

**13 Display top 3 highest-paid employees**

SELECT \* FROM Employees ORDER BY Salary DESC LIMIT 3;

**14. Find second-highest salary**

SELECT MAX(Salary)

FROM Employees

WHERE Salary < (SELECT MAX(Salary) FROM Employees);

**15. Find employees who work in either “IT” or “Finance”**

SELECT \* FROM Employees WHERE Department IN ('IT', 'Finance');

**16. Count employees in each department**

SELECT Department, COUNT(\*) AS Total FROM Employees GROUP BY Department;

**17. Find total salary per department**

SELECT Department, SUM(Salary) AS Total\_Salary FROM Employees GROUP BY Department;

**18. Find departments having more than 5 employees**

SELECT Department, COUNT(\*)

FROM Employees

GROUP BY Department

HAVING COUNT(\*) > 5;

**19. Display employee name and department name using JOIN**

SELECT e.Name, d.DeptName

FROM Employees e

JOIN Departments d ON e.DeptID = d.DeptID;

**20. Show all employees even if they don’t belong to any department**

SELECT e.Name, d.DeptName

FROM Employees e

LEFT JOIN Departments d ON e.DeptID = d.DeptID;

**21. Find employees who joined in 2023**

SELECT \* FROM Employees

WHERE YEAR(HireDate) = 2023;

**22 .Retrieve employees sorted by department and then by salary**

SELECT \* FROM Employees ORDER BY Department, Salary DESC;

**23. Find duplicate employee names**

SELECT Name, COUNT(\*)

FROM Employees

GROUP BY Name

HAVING COUNT(\*) > 1;

**24. Delete duplicate records from Employees**

DELETE FROM Employees

WHERE EmpID NOT IN (

SELECT MIN(EmpID) FROM Employees GROUP BY Name

);

**25. Find employees earning more than their department’s average**

SELECT Name, Salary

FROM Employees e

WHERE Salary > (

SELECT AVG(Salary) FROM Employees WHERE Department = e.Department

);

**26. Find departments with total salary > 200,000**

SELECT Department, SUM(Salary) AS Total

FROM Employees

GROUP BY Department

HAVING SUM(Salary) > 200000;

**27. Find 3 lowest salaries**

SELECT \* FROM Employees ORDER BY Salary ASC LIMIT 3;

**28. Show employee and their manager name (Self Join)**

SELECT e.Name AS Employee, m.Name AS Manager

FROM Employees e

JOIN Employees m ON e.ManagerID = m.EmpID;

**29. Display the total number of employees per manager**

SELECT ManagerID, COUNT(\*) AS Team\_Size

FROM Employees GROUP BY ManagerID;

**30. Find employees working in departments located in “Bangalore”**

SELECT e.Name, d.Location

FROM Employees e

JOIN Departments d ON e.DeptID = d.DeptID

WHERE d.Location = 'Bangalore';

**31. Retrieve employee details with department and project names**

SELECT e.Name, d.DeptName, p.ProjectName

FROM Employees e

JOIN Departments d ON e.DeptID = d.DeptID

JOIN Projects p ON e.ProjectID = p.ProjectID;

**32. Count number of projects handled by each employee**

SELECT EmpID, COUNT(ProjectID) AS Total\_Projects

FROM EmployeeProjects GROUP BY EmpID;

**33. Find employees who earn the same salary**

SELECT Salary, COUNT(\*)

FROM Employees

GROUP BY Salary

HAVING COUNT(\*) > 1;

**34. Calculate the percentage of employees in each department**

SELECT Department,

(COUNT(\*) \* 100.0 / (SELECT COUNT(\*) FROM Employees)) AS Percentage

FROM Employees GROUP BY Department;

**35. Find employees hired in the last 90 days**

SELECT \* FROM Employees

WHERE HireDate >= CURDATE() - INTERVAL 90 DAY;

**36. Retrieve alternate rows (odd records)**

SELECT \* FROM Employees WHERE MOD(EmpID,2) = 1;

**37. Find even-numbered rows**

SELECT \* FROM Employees WHERE MOD(EmpID,2) = 0;

**38. Find employees earning more than their manager**

SELECT e.Name

FROM Employees e

JOIN Employees m ON e.ManagerID = m.EmpID

WHERE e.Salary > m.Salary;

**39. Display employee names starting with ‘A’**

SELECT \* FROM Employees WHERE Name LIKE 'A%';

]

**40. Display employees whose names end with ‘n’**

SELECT \* FROM Employees WHERE Name LIKE '%n';

]

**41. Find employees who don’t belong to any department**

SELECT \* FROM Employees WHERE DeptID IS NULL;

**42. Retrieve total salary and average per city**

SELECT City, SUM(Salary) AS Total, AVG(Salary) AS Average

FROM Employees GROUP BY City;

**43. Find employees who have the same hire date**

SELECT HireDate, COUNT(\*)

FROM Employees GROUP BY HireDate

HAVING COUNT(\*) > 1;

**44. Fetch top 2 employees by salary per department (using Window Function)**

SELECT \* FROM (

SELECT Name, Department, Salary,

RANK() OVER (PARTITION BY Department ORDER BY Salary DESC) AS rnk

FROM Employees

) t WHERE rnk <= 2;

**45. Find employees with salary between 40,000 and 60,000**

SELECT \* FROM Employees WHERE Salary BETWEEN 40000 AND 60000;

**46. Find departments with no employees**

SELECT \* FROM Departments

WHERE DeptID NOT IN (SELECT DISTINCT DeptID FROM Employees);

**47. Find total number of managers**

SELECT COUNT(DISTINCT ManagerID) FROM Employees WHERE ManagerID IS NOT NULL;

**48. Retrieve employee data using a temporary table**

CREATE TEMPORARY TABLE TempEmp AS

SELECT \* FROM Employees WHERE Salary > 60000;

**49. Find number of employees hired each year**

SELECT YEAR(HireDate) AS Year, COUNT(\*) AS Total

FROM Employees GROUP BY YEAR(HireDate);

**50. Display employees sorted by department and name**

SELECT \* FROM Employees ORDER BY Department, Name;

**51. Find departments with average salary above 70,000**

SELECT Department, AVG(Salary) AS Avg\_Salary

FROM Employees GROUP BY Department HAVING AVG(Salary) > 70000;

**52. Find employees whose salary is same as department average**

SELECT e.Name, e.Department

FROM Employees e

JOIN (SELECT Department, AVG(Salary) AS AvgSal

FROM Employees GROUP BY Department) d

ON e.Department = d.Department

WHERE e.Salary = d.AvgSal;

**53. Retrieve top 5 highest-paid employees overall**

SELECT \* FROM Employees ORDER BY Salary DESC LIMIT 5;

**54. Find employees who joined before their manager**

SELECT e.Name FROM Employees e

JOIN Employees m ON e.ManagerID = m.EmpID

WHERE e.HireDate < m.HireDate;

**55. Calculate total salary per department using CTE**

WITH DeptCTE AS (

SELECT Department, SUM(Salary) AS Total

FROM Employees GROUP BY Department

)

SELECT \* FROM DeptCTE;