MY **SQL** (20 QUESTIONS)

use dharshini;

CREATE TABLE Employees (

EmployeeID INT AUTO\_INCREMENT PRIMARY KEY,

FirstName VARCHAR(50),

LastName VARCHAR(50),

Gender ENUM('Male', 'Female'),

Age INT,

ExperienceYears INT,

Salary DECIMAL(10, 2),

Department VARCHAR(50),

HireDate DATE

);

INSERT INTO Employees (FirstName, LastName, Gender, Age, ExperienceYears, Salary,

Department, HireDate) VALUES

('John', 'Doe', 'Male', 32, 6, 75000.00, 'Engineering', '2019-04-10'),

('Jane', 'Smith', 'Female', 29, 4, 65000.00, 'HR', '2020-02-15'),

('Mike', 'Brown', 'Male', 40, 10, 85000.00, 'Sales', '2015-08-20'),

('Emily', 'Davis', 'Female', 35, 7, 72000.00, 'Engineering', '2018-05-18'),

('Chris', 'Wilson', 'Male', 27, 3, 48000.00, 'Engineering', '2022-01-12'),

('Laura', 'Lee', 'Female', 31, 6, 59000.00, 'HR', '2019-11-03'),

('Daniel', 'Clark', 'Male', 45, 15, 95000.00, 'Sales', '2010-07-01'),

('Sophia', 'Martinez', 'Female', 26, 2, 54000.00, 'Sales', '2023-03-22'),

('Ethan', 'Nguyen', 'Male', 30, 5, 70000.00, 'Engineering', '2020-09-15'),

('Olivia', 'Turner', 'Female', 38, 12, 88000.00, 'HR', '2011-04-01'),

('Liam', 'Scott', 'Male', 28, 4, 62000.00, 'Engineering', '2021-06-18'),

('Ava', 'Hill', 'Female', 24, 1, 46000.00, 'HR', '2024-01-25'),

('Noah', 'Adams', 'Male', 33, 7, 77000.00, 'Sales', '2017-03-10'),

('Emma', 'Clark', 'Female', 36, 9, 69000.00, 'Engineering', '2016-12-09'),

('Lucas', 'Moore', 'Male', 29, 5, 58000.00, 'Sales', '2020-05-15');

Basic Aggregation &amp; Grouping (1–10)

1. Find the total salary paid in each department.

2. Find departments where the average salary is above 60,000.

3. Count the number of employees in each department.

4. List genders with more than 3 employees.

5. Find departments where the total number of employees is greater than 2.

6. List departments where the maximum salary is more than 70,000.

7. List departments with minimum salary less than 50,000.

8. Find gender-wise average salary.

9. Find departments where total salary paid is over 150,000.

10. List departments where average experience is greater than 5 years.

With WHERE Conditions (11–20)

11. Find departments with total salary over 100,000, but only consider male employees.

12. List departments where the average age of female employees is more than 30.

13. Find departments where the number of employees under 35 years old is greater than 2.

14. Show departments where the sum of salary for employees with more than 5 years of

experience exceeds 120,000.

15. Find gender-wise average salary for employees older than 30.

16. List departments where the count of employees with salary above 60,000 is more than 2.

17. List departments where average salary of female employees is less than 55,000.

18. Find departments where maximum age of employees is less than 40.

19. Find departments where minimum experience of male employees is greater than 3.

20. Find departments where total salary of employees aged 25–35 is above 100,000.

SELECT Department, SUM(Salary) AS TotalSalary

FROM Employees

GROUP BY Department;

SELECT Department, AVG(Salary) AS AvgSalary

FROM Employees

GROUP BY Department

HAVING AVG(Salary) > 60000;

SELECT Department, COUNT(\*) AS EmployeeCount

FROM Employees

GROUP BY Department;

SELECT Gender, COUNT(\*) AS CountPerGender

FROM Employees

GROUP BY Gender

HAVING COUNT(\*) > 3;

SELECT Department, COUNT(\*) AS EmployeeCount

FROM Employees

GROUP BY Department

HAVING COUNT(\*) > 2;

SELECT Department, MAX(Salary) AS MaxSalary

FROM Employees

GROUP BY Department

HAVING MAX(Salary) > 70000;

SELECT Department, MIN(Salary) AS MinSalary

FROM Employees

GROUP BY Department

HAVING MIN(Salary) < 50000;

SELECT Gender, AVG(Salary) AS AvgSalary

FROM Employees

GROUP BY Gender;

SELECT Department, SUM(Salary) AS TotalSalary

FROM Employees

GROUP BY Department

HAVING SUM(Salary) > 150000;

SELECT Department, AVG(ExperienceYears) AS AvgExperience

FROM Employees

GROUP BY Department

HAVING AVG(ExperienceYears)>5;

SELECT Department, SUM(Salary) AS TotalMaleSalary

FROM Employees

WHERE Gender = 'Male'

GROUP BY Department

HAVING SUM(Salary) > 100000;

SELECT Department, AVG(Age) AS AvgFemaleAge

FROM Employees

WHERE Gender = 'Female'

GROUP BY Department

HAVING AVG(Age) > 30;

SELECT Department, COUNT(\*) AS YoungEmpCount

FROM Employees

WHERE Age < 35

GROUP BY Department

HAVING COUNT(\*) > 2;

SELECT Department, SUM(Salary) AS ExperiencedSalary

FROM Employees

WHERE ExperienceYears > 5

GROUP BY Department

HAVING SUM(Salary) > 120000;

SELECT Gender, AVG(Salary) AS AvgSalaryAbove30

FROM Employees

WHERE Age > 30

GROUP BY Gender;

SELECT Department, COUNT(\*) AS HighSalaryEmp

FROM Employees

WHERE Salary > 60000

GROUP BY Department

HAVING COUNT(\*) > 2;

SELECT Department, AVG(Salary) AS AvgFemaleSalary

FROM Employees

WHERE Gender = 'Female'

GROUP BY Department

HAVING AVG(Salary) < 55000;

SELECT Department, MAX(Age) AS MaxAge

FROM Employees

GROUP BY Department

HAVING MAX(Age) < 40;

SELECT Department, MIN(ExperienceYears) AS MinMaleExperience

FROM Employees

WHERE Gender = 'Male'

GROUP BY Department

HAVING MIN(ExperienceYears) > 3;

SELECT Department, SUM(Salary) AS TotalSalary\_25\_35

FROM Employees

WHERE Age BETWEEN 25 AND 35

GROUP BY Department

HAVING SUM(Salary) > 100000;