Assignment

Week 12

Step 4: SQL (Week 11-13)
Week 12: Basics - SELECT, WHERE, ORDER BY, LIMIT, Aliasing
Q1. Create and Insert Data. Create a table named Employees with the following columns: EmployeeID, Name, Department, Salary, JoiningDate.
Q2. Select all columns from the Employees table.
Q3. Display only Name and Department columns.
Q4. Show all employees who work in the IT department.
Q5. Retrieve employees with a Salary greater than 45,000.
Q6. Show employees who joined after 2020-01-01.
Q7. Retrieve employees with a salary between 40,000 and 55,000.
Q8. Display employees whose department is either HR or Finance.
Q9. Retrieve employees whose name starts with 'S'.
Q10. Show employees whose name ends with 'a'.
Q11. Display employees ordered by salary in descending order.
Q12. Display the first 3 employees based on joining date.
Q13. Retrieve employees skipping the first 2 rows using OFFSET.
Q14. Show employee names as Employee_Name using alias.
Q15. Display Department as Dept and Salary as Income.
Q16. Combine aliasing with sorting: Show top 3 highest paid employees with columns Employee_Name and Income.
Q17. Find the highest salary in the Employees table.
Q18. Find the total number of employees in each department.
Q19. Show the average salary of all employees.
Q20. Display the employee(s) with the lowest salary.

Assignment

Week 13

Week 13: GROUP BY, HAVING, Joins (Inner, Left, Right, Full), Subqueries

Q1. Count how many employees are in each Department.

Q2. Find the average salary per department.

Q3. Show the highest and lowest salary in each department.

Q4. Show the total salary paid per department.

Q5. Count how many employees joined in each year (use YEAR(Joining Date)).

Q6. Find departments that have more than 1 employee.

Q7. Find departments where average salary > 50,000.

Q8. Find joining years where more than 2 employees joined.

Q9. Perform an INNER JOIN to show Employee Name with their Department Manager.

Q10. Perform a LEFT JOIN to list all employees and their managers, even if manager info is missing.

Q11. Show total salary per department using JOIN + GROUP BY.

Q12. Find the employee with the highest salary using a subquery.

Q13. Find all employees who earn more than the average salary.

Q14. Find the second highest salary using a subquery.

Q15. Find employees who joined after the employee with the lowest salary.

Q16. List all departments that have any employee earning more than 60,000.

Q17. Find the total number of employees and total salary in each department.

Q18. List all employees whose salary is the maximum in their department.

Q19. Show all departments where no employee earns less than 45,000 (use HAVING).

Q20. Find employees whose joining year is the same as any HR department employee (use subquery).