

# Lab-1 Data Query Language with MS SQL Server

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Employee Table Structure	
employee id	int
first_name	varchar(50)
last_name	varchar(50)
salary	money
department	varchar(50)
emp_dob	Date
emp_gender	varchar(10)

## 1. Retrieve All Columns from a Table

- How can you retrieve all columns from a table named employees?

## 2. Retrieve Specific Columns

- How can you retrieve only the first\_name, last\_name, and salary columns from the employees table?

## 3.Using WHERE Clause to Filter Results

- How can you retrieve all employees with a salary greater than 50,000 from the employees table?

## 4.Using ORDER BY to Sort Results

- How can you retrieve the names and salaries of employees, sorted by salary in descending order?

## 5. Using LIMIT to Restrict the Number of Results

- How can you retrieve only the top 5 highest-paid employees from the employees table?

## 6. How to filter aggregated data with the HAVING clause?

- How do you retrieve departments with total salary greater than 100000?

## 7. How to use `HAVING` with `COUNT` for filtering groups?

- How do you retrieve departments that have more than 5 employees?

## 8. How to combine `HAVING` and `WHERE` clauses?

- How do you find departments where employees have a salary greater than 50000, but the department's total salary is less than 200000?

## 9. How to use a subquery in the `WHERE` clause?

- How do you retrieve employees whose salary is higher than the average salary of all employees?

## 10. How to use a subquery in the `FROM` clause (inline view)?

- How do you retrieve the department names and the total salary for each department, using a subquery in the `FROM` clause?

## 11. How to use a subquery in the `SELECT` clause?

- How do you retrieve employee details along with the average salary in their department?

## 12. How to combine results from two queries using `UNION`?

- How do you retrieve all unique job titles from two different departments, "HR" and "Finance", and combine them into one result set?

## 13. How to combine results from two queries using `UNION ALL`?

- How do you retrieve all job titles from both the "HR" and "Finance" departments, including duplicates?

## 14. How to find records in one result set but not in another using `EXCEPT`?

- How do you retrieve job titles from the "HR" department that are not present in the "Finance" department?

## 15. How to use a `CASE` expression in the `SELECT` clause?

- How do you categorize employees based on their salary? For example, categorize them as "Low", "Medium", or "High" salary.