

SQL Query Report

1. Retrieve all details of employees:

- Displays all records from the employees table with full details.

2. Display first name, last name, and email of all employees:

- Extracts only the first_name, last_name, and email fields for all employees.

3. Retrieve the distinct job titles from the jobs table:

- Returns a unique list of job titles available in the jobs table.

4. Find the total number of employees in the company:

- Counts the total number of rows in the employees table.

5. Retrieve the employees who were hired after January 1, 2015:

- Filters employees whose hire_date is later than '2015-01-01'.

6. List all employees who have a salary greater than 5000:

- Returns employees whose salary is more than 5000.

7. Retrieve employees with job titles containing the word 'Manager':

- Joins employees and jobs tables to find employees with job titles that include 'Manager'.

8. Retrieve all employees whose first name starts with 'A' and ends with 'n':

- Uses the LIKE operator to find names matching the pattern 'A%n'.

9. Display the employees who do not have a commission:

- Filters employees where the commission field is NULL.

10. Retrieve the top 5 highest-paid employees:

- Sorts employees by salary in descending order and limits the output to 5 records.

11. Find the average salary of all employees:

- Calculates the average value of the salary column.

12. Retrieve the total number of employees working in each department:

- Groups employees by department_id and counts the employees in each group.

13. Display the employee's first name and the length of their first name:

- Uses the LENGTH() function to return the number of characters in each first name.

14. Convert the hire_date of employees to display only the year:

- Extracts the year from hire_date (database-specific function used).

15. Retrieve the minimum and maximum salary for each job title:

- Groups data by job_id and returns MIN(salary) and MAX(salary).

16. Retrieve the employee names along with their department names:

- Joins employees and departments tables to retrieve employee names and their department names.

17. List the employees along with their job titles and the location of their department:

- Joins employees, jobs, and departments tables to retrieve job titles and department locations.

18. Retrieve the department names along with the count of employees in each department:

- Performs a LEFT JOIN between departments and employees, grouping by department_name and counting employees.

19. Find employees who have the same job as their manager:

- Uses a self-join on the employees table to match job_id between employees and their managers.

20. Display the names of employees who worked in different jobs in the past:

- Joins employees with job_history to find employees who have job history records, indicating past job changes.

Summary: These queries help analyze the employee database, providing insights into employee details, salaries, job roles, department distributions, and job history records. The queries also demonstrate the use of JOIN, GROUP BY, filtering, and aggregation functions to extract meaningful data.