



SparkINN

Novice Solution Pvt. Ltd

Task: Employee Data Analysis and Reporting

Problem Statement:

You are working as a data analyst for a company that manages employee records in a MySQL database. Your manager has asked you to generate a detailed report based on the employee data. This report should include several aspects of data analysis and text manipulation using SQL functions.

Database Schema:

You have access to the following table:

Employees Table:

Column Name	Data Type
EmployeeID	INT
FirstName	VARCHAR
LastName	VARCHAR
Position	VARCHAR
Salary	DECIMAL
Department	VARCHAR
HireDate	DATE

Tasks:

- Generate Basic Employee Data Report:**
 - Retrieve the first 10 employees from the `Employees` table, including their `EmployeeID`, `FirstName`, `LastName`, `Position`, and `Salary`.
 - Sort the results by `Salary` in descending order.
- Text Manipulation and Formatting:**
 - Create a new column in the result that displays the full name of each employee in uppercase.
 - Extract and display the first 3 characters of the `Position` field for each employee.
- Advanced Text Search and Filtering:**
 - Find all employees whose `Position` contains the substring 'Manager' and display their `FirstName`, `LastName`, and `Position`.
 - Identify and display the position of the first occurrence of the character 'a' in each `Department` field.
- Data Analysis and Aggregation:**

- Calculate the total salary of employees whose names start with 'J' (both `FirstName` and `LastName`).
 - Find the average salary of employees who were hired in the last year.
5. **Formatted Report:**
- Create a report showing the employee names (both `FirstName` and `LastName`), their `Position`, and the length of their `Position` title.
 - Ensure that the employee names are trimmed of any extra spaces and displayed in proper case (first letter uppercase, the rest lowercase).

Instructions:

- Execute the SQL queries using a MySQL client or tool.
- Ensure that the results match the specified format and requirements.
- Verify that all string manipulations are correctly applied and that the results are accurate.



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