

Writeup for SQL Project :-

SQL PROJECT :-

Science Qtech Employee Performance Mapping.

These tasks are performed:

1. Created a database named employee, then imported **data_science_team.csv**, **proj_table.csv** and **emp_record_table.csv** into the **employee** database from the given resources.
2. Created an ER diagram for the given **employee** database.
3. Written a query to fetch EMP_ID, FIRST_NAME, LAST_NAME, GENDER, and DEPARTMENT from the employee record table, and made a list of employees and details of their department.
4. Written a query to fetch EMP_ID, FIRST_NAME, LAST_NAME, GENDER, DEPARTMENT, and EMP_RATING if the EMP_RATING is:
 - less than two
 - greater than four
 - between two and four
5. Written a query to concatenate the FIRST_NAME and the LAST_NAME of employees in the Finance department from the employee table and then given the resultant column alias as NAME.
6. Written a query to list only those employees who have someone reporting to them. Also, shown the number of reporters (including the President).
7. Written a query to list down all the employees from the healthcare and finance departments using union. Data taken from the employee record table.
8. Written a query to list down employee details such as EMP_ID, FIRST_NAME, LAST_NAME, ROLE, DEPARTMENT, and EMP_RATING grouped by dept. Also include the respective employee rating along with the max emp rating for the department.

9. Written a query to calculate the minimum and the maximum salary of the employees in each role. Data taken from the employee record table.
10. Written a query to assign ranks to each employee based on their experience. Data taken from the employee record table.
11. Written a query to create a view that displays employees in various countries whose salary is more than six thousand. Data taken from the employee record table.
12. Written a nested query to find employees with experience of more than ten years. Data taken from the employee record table.
13. Written a query to create a stored procedure to retrieve the details of the employees whose experience is more than three years. Data taken from the employee record table.
14. Written a query using stored functions in the project table to check whether the job profile assigned to each employee in the data science team matches the organization's set standard.

The standard being:

For an employee with experience less than or equal to 2 years assign 'JUNIOR DATA SCIENTIST',

For an employee with the experience of 2 to 5 years assign 'ASSOCIATE DATA SCIENTIST',

For an employee with the experience of 5 to 10 years assign 'SENIOR DATA SCIENTIST',

For an employee with the experience of 10 to 12 years assign 'LEAD DATA SCIENTIST',

For an employee with the experience of 12 to 16 years assign 'MANAGER'.

15. Created an index to improve the cost and performance of the query to find the employee whose FIRST_NAME is 'Eric' in the employee table after checking the execution plan.
16. Written a query to calculate the bonus for all the employees, based on their ratings and salaries (Use the formula: 5% of salary * employee rating).
17. Written a query to calculate the average salary distribution based on the continent and country. Data taken from the employee record table.