**ScienceQtech Employee Performance Mapping.**

**The task to be performed:**

1. Create a database named *employee*, then import **data\_science\_team.csv proj\_table.csv** and **emp\_record\_table.csv** into the **employee** database from the given resources.

use employee;

show tables;

1. Write a query to fetch EMP\_ID, FIRST\_NAME, LAST\_NAME, GENDER, and DEPARTMENT from the employee record table, andmake a list of employees and details of their department.

select EMP\_ID, FIRST\_NAME, LAST\_NAME, GENDER, DEPT from emp\_record\_table;

1. Write 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

Select EMP\_ID, FIRST\_NAME, LAST\_NAME, GENDER, DEPT,EMP\_RATING from emp\_record\_table where emp\_rating<2;

Select EMP\_ID, FIRST\_NAME, LAST\_NAME, GENDER, DEPT,EMP\_RATING from emp\_record\_table where emp\_rating>4;

Select EMP\_ID, FIRST\_NAME, LAST\_NAME, GENDER, DEPT,EMP\_RATING from emp\_record\_table where emp\_rating between 2 and 4;

1. Write a query to concatenate the FIRST\_NAME and the LAST\_NAME of employees in the *Finance* department from the employee table and then give the resultant column alias as NAME.

select concat(first\_name , last\_name) as name from emp\_record\_table where dept='Finance';

1. Write a query to list only those employees who have someone reporting to them. Also, show the number of reporters (including the President).

SELECT MANAGER\_ID AS Employee\_ID, COUNT(\*) AS Number\_of\_Reporters from emp\_record\_table

WHERE MANAGER\_ID IS NOT NULL GROUP BY MANAGER\_ID;

1. Write a query to list down all the employees from the healthcare and finance departments using union. Take data from the employee record table.

select concat(first\_name , ' ',last\_name ) as Name from emp\_record\_table where dept='Finance'

union all

select concat(first\_name , ' ' ,last\_name ) as Name from emp\_record\_table where dept='HealthCare';

1. Write 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.

select EMP\_ID, FIRST\_NAME, LAST\_NAME, ROLE, dept, EMP\_RATING , max(emp\_rating) over(order by dept) as Max\_Rating

from emp\_record\_table;

1. Write a query to calculate the minimum and the maximum salary of the employees in each role. Take data from the employee record table.

SELECT ROLE, MIN(SALARY) AS Min\_Salary, MAX(SALARY) AS Max\_Salary FROM emp\_record\_table GROUP BY ROLE;

1. Write a query to assign ranks to each employee based on their experience. Take data from the employee record table.

select emp\_id, concat(first\_name , last\_name) as name , exp , rank() over(order by exp desc) as rank\_exp from emp\_record\_table;

1. Write a query to create a view that displays employees in various countries whose salary is more than six thousand**.** Take data from the employee record table.

create view country as

select emp\_id, first\_name , last\_name , country , salary from emp\_record\_table where salary > 6000;

select \* from country;

1. Write a nested query to find employees with experience of more than ten years. Take data from the employee record table.

select \* from emp\_record\_table where exp>(select min(exp)+10 from emp\_record\_table) ;

1. Write a query to create a stored procedure to retrieve the details of the employees whose experience is more than three years. Take data from the employee record table.

CREATE DEFINER=`root`@`localhost` PROCEDURE `emp\_details`()

BEGIN

select \* from emp\_record\_table where exp>3;

END

CALL `employee`.`emp\_details`();

1. Write 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:

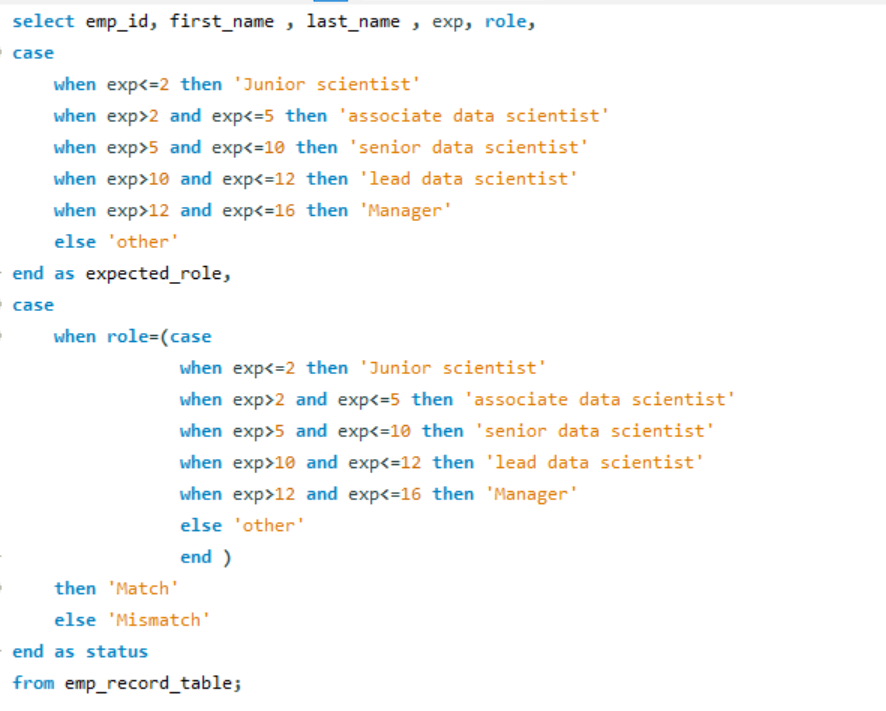
For an employee with experience less than or equal to 2 years assign 'JUNIOR DATA SCIENTIST',

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'.



1. Create 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.

CREATE INDEX i1 ON emp\_record\_table(first\_name);

SELECT \* FROM employee.emp\_record\_table WHERE FIRST\_NAME = 'Eric';

1. Write a query to calculate the bonus for all the employees, based on their ratings and salaries (Use the formula: 5% of salary \* employee rating).

select emp\_id, first\_name , last\_name , salary , emp\_rating, (0.05 \* salary \* emp\_rating) as bonus from emp\_record\_table;

1. Write a query to calculate the average salary distribution based on the continent and country. Take data from the employee record table.

select country , continent , avg(salary) as Avg\_Salary from emp\_record\_table group by continent , country order by continent , country;