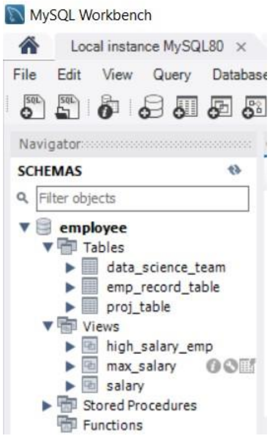
ScienceQtech Employee Performance Mapping.

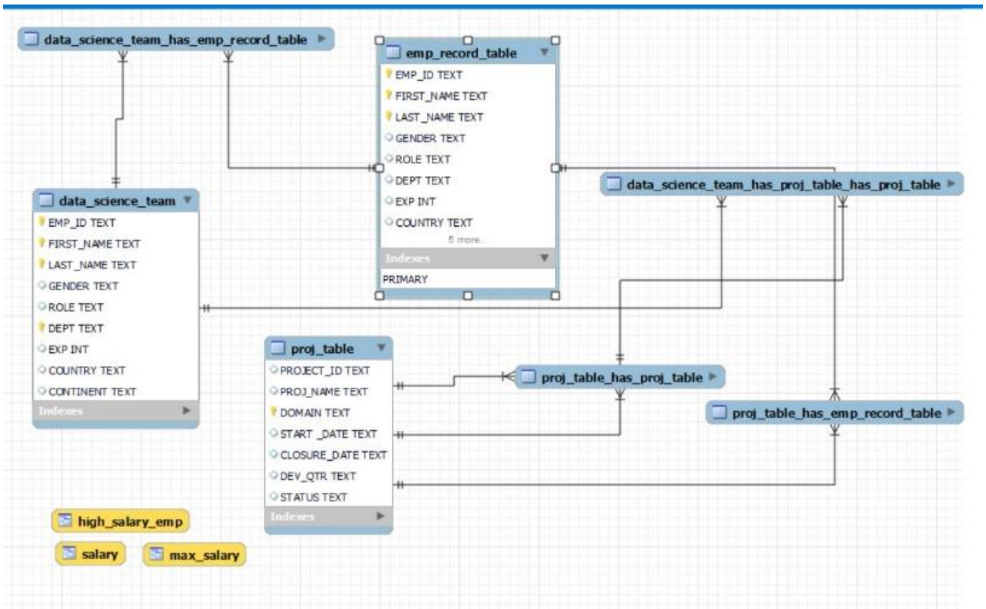
The task to be performed:

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.

ANSWER-



2. Create an ER diagram for the given **employee** database.



3. Write a query to fetch EMP_ID, FIRST_NAME, LAST_NAME, GENDER, and DEPARTMENT from the employee record table, and make a list of employees and details of their department.
   a. SELECT * FROM employee.emp_record_table;
   b. SELECT EMP_ID, FIRST_NAME, LAST_NAME, GENDER, DEPT FROM employee.emp_record_table;

4. 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, EMP_RATING, DEPT FROM
employee.emp_record_table WHERE EMP_RATING>4;

SELECT EMP_ID, FIRST_NAME, LAST_NAME, GENDER, EMP_RATING, DEPT FROM
employee.emp_record_table WHERE EMP_RATING<2;

SELECT EMP_ID, FIRST_NAME, LAST_NAME, GENDER, EMP_RATING, DEPT FROM
employee.emp_record_table WHERE EMP_RATING BETWEEN 2 AND 4;
```

5. 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
employee.emp_record_table WHERE DEPT='FINANCE’ ;
```

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

```
SELECT EMP_ID, FIRST_NAME, LAST_NAME, DEPT, ROLE, MANAGER_ID FROM
employee.emp_record_table;
```

7. 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 EMP_ID, FIRST_NAME, LAST_NAME, DEPT FROM
employee.emp_record_table WHERE DEPT='HEALTHCARE' UNION  SELECT
EMP_ID, FIRST_NAME, LAST_NAME, DEPT FROM employee.emp_record_table
WHERE DEPT='FINANCE';
```

8. 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 (PARTITION BY DEPT) AS max_EMP_RATING FROM
employee.emp_record_table order by DEPT;
```

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

   a. SELECT MAX(SALARY) as max_SALARY FROM
   employee.emp_record_table;

b. SELECT ROLE, MIN(SALARY) as min_SALARY, MAX(SALARY) as max_SALARY FROM employee.emp_record_table GROUP BY ROLE;

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

SELECT EMP_ID, FIRST_NAME, LAST_NAME, ROLE, EXP,RANK() OVER (ORDER BY EXP) as EXP_RANK FROM employee.emp_record_table;

11.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.

SELECT EMP_ID, FIRST_NAME, LAST_NAME, SALARY, COUNTRY FROM employee.emp_record_table WHERE salary > 6000 ORDER BY COUNTRY;

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

SELECT EMP_ID, FIRST_NAME, LAST_NAME, ROLE, EXP, SALARY FROM employee.emp_record_table WHERE EXP>10;

13.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.

SELECT EMP_ID, FIRST_NAME, LAST_NAME, ROLE, EXP, SALARY FROM employee.emp_record_table WHERE EXP>3;

14.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'.

SELECT * FROM employee.data_science_team ;

SELECT EMP_ID, FIRST_NAME, LAST_NAME, ROLE FROM employee.data_science_team;

```
SELECT EMP_ID, EXP,

    CASE

        WHEN EXP <= 2 THEN 'JUNIOR DATA SCIENTIST'

        WHEN EXP > 2 AND EXP <= 5 THEN 'ASSOCIATE DATA SCIENTIST'

        WHEN EXP > 5 AND EXP <= 10 THEN 'SENIOR DATA SCIENTIST'

        WHEN EXP > 10 AND EXP<= 12 THEN 'LEAD DATA SCIENTIST'
    END AS ROLE

    FROM  employee.data_science_team;



    SELECT ROLE FROM  employee.emp_record_table ;

SELECT EMP_ID, ROLE, EXP,

CASE

WHEN EXP>=12 AND EXP<=15 THEN 'MANAGER'

END AS ROLE

FROM  employee.emp_record_table ;
```

15.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.

```
SELECT EMP_ID, FIRST_NAME, LAST_NAME, EMP_RATING FROM
employee.emp_record_table WHERE FIRST_NAME = 'Eric';
```

16. 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, EMP_RATING,  SALARY * 0.05 *
EMP_RATING  AS bonus FROM employee.emp_record_table;
```

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

```
SELECT CONTINENT,  COUNTRY,  AVG(SALARY) AS avg_SALARY FROM
employee.emp_record_table  GROUP BY CONTINENT, COUNTRY;
```