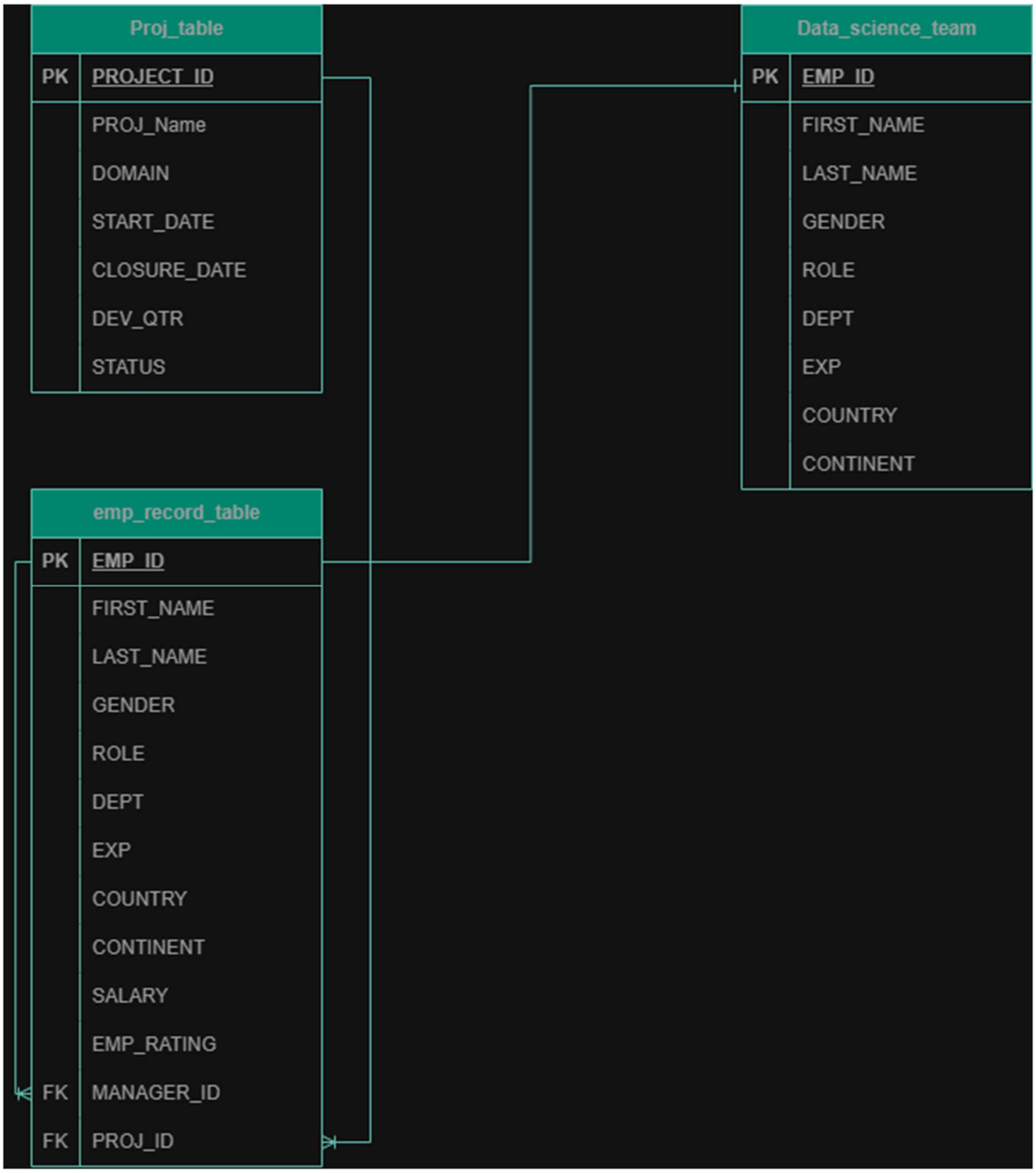
EMPLOYEE PERFORMANCE MAPPING

Ali Hamza Shaikh

1. CREATE AN ER DIAGRAM FOR THE GIVEN EMPLOYEE DATABASE.



Query End

2. 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.

➔ QUERY:

```
Select emp_id, first_name, last_name, gender,
dept
from emp_record_table;
```

emp_id	first_name	last_name	gender	dept
E001	Arthur	Black	M	ALL
E005	Eric	Hoffman	M	FINANCE
E010	William	Butler	M	AUTOMOTIVE
E052	Dianna	Wilson	F	HEALTHCARE
E057	Dorothy	Wilson	F	HEALTHCARE
E083	Patrick	Voltz	M	HEALTHCARE
E103	Emily	Grove	F	FINANCE
E204	Karene	Nowak	F	AUTOMOTIVE
E245	Nian	Zhen	M	RETAIL
E260	Roy	Collins	M	RETAIL
E403	Steve	Hoffman	M	FINANCE
E428	Pete	Allen	M	AUTOMOTIVE
E478	David	Smith	M	RETAIL
E505	Chad	Wilson	M	HEALTHCARE
E532	Claire	Brennan	F	AUTOMOTIVE
E583	Janet	Hale	F	RETAIL
E612	Tracy	Norris	F	RETAIL
E620	Katrina	Allen	F	RETAIL
E640	Jenifer	Jhones	F	RETAIL

Query End

3. 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

➔ QUERY:

```
Select
emp_id,first_name,last_name,gender,dept,emp_r
ating,
CASE
    WHEN EMP_RATING < 2 Then 'less than 2'
        WHEN EMP_RATING > 4 Then 'Greater
than 4'
        WHEN EMP_RATING BETWEEN 2 AND 4
Then 'Between 2 and 4'
 END AS rating_category from emp_record_table;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	first_name	last_name	gender	dept	emp_rating	rating_category
E001	Arthur	Black	M	ALL	5	Greater than 4
E005	Eric	Hoffman	M	FINANCE	3	Between 2 and 4
E010	William	Butler	M	AUTOMOTIVE	2	Between 2 and 4
E052	Dianna	Wilson	F	HEALTHCARE	5	Greater than 4
E057	Dorothy	Wilson	F	HEALTHCARE	1	less than 2
E083	Patrick	Voltz	M	HEALTHCARE	5	Greater than 4
E103	Emily	Grove	F	FINANCE	4	Between 2 and 4
E204	Karene	Nowak	F	AUTOMOTIVE	5	Greater than 4
E245	Nian	Zhen	M	RETAIL	2	Between 2 and 4
E260	Roy	Collins	M	RETAIL	3	Between 2 and 4
E403	Steve	Hoffman	M	FINANCE	3	Between 2 and 4
E428	Pete	Allen	M	AUTOMOTIVE	4	Between 2 and 4
E478	David	Smith	M	RETAIL	4	Between 2 and 4
E505	Chad	Wilson	M	HEALTHCARE	2	Between 2 and 4
E532	Claire	Brennan	F	AUTOMOTIVE	1	less than 2
E583	Janet	Hale	F	RETAIL	2	Between 2 and 4
E612	Tracy	Norris	F	RETAIL	4	Between 2 and 4
E620	Katrina	Allen	F	RETAIL	1	less than 2
E640	Jenifer	Jhones	F	RETAIL	4	Between 2 and 4

Result 33 ×

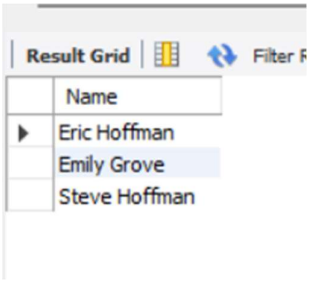
Output

Query End

4. 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.

➔ QUERY:

```
Select Concat(First_Name,' ', Last_Name) AS
Name
 from emp_record_table
 where dept = 'Finance';
```

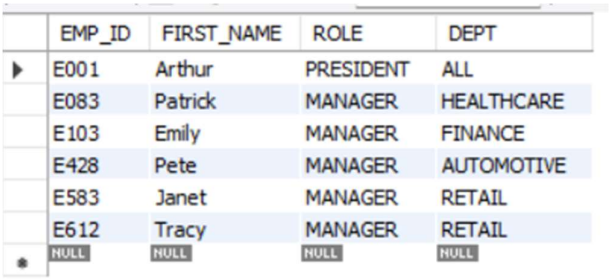


Query End

5. WRITE A QUERY QUERY TO RETRIEVE THE EMPLOYEE ID, FIRST NAME, ROLE, AND DEPARTMENT OF EMPLOYEES WHO HOLD LEADERSHIP POSITIONS (MANAGER, PRESIDENT, OR CEO).

➔ QUERY:

```
SELECT EMP_ID, FIRST_NAME, ROLE, DEPT
FROM emp_record_table
WHERE ROLE IN ('Manager', 'President',
'CEO');
```



EMP_ID	FIRST_NAME	ROLE	DEPT
E001	Arthur	PRESIDENT	ALL
E083	Patrick	MANAGER	HEALTHCARE
E103	Emily	MANAGER	FINANCE
E428	Pete	MANAGER	AUTOMOTIVE
E583	Janet	MANAGER	RETAIL
E612	Tracy	MANAGER	RETAIL
NULL	NULL	NULL	NULL

Query End

6. WRITE A QUERY TO LIST ALL THE EMPLOYEES FROM THE HEALTHCARE AND FINANCE DEPARTMENTS USING THE UNION. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY:

```
Select * from emp_record_table
 where dept = 'HEALTHCARE'

UNION

Select * from emp_record_table
where dept = 'FINANCE';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

EMP_ID	FIRST_NAME	LAST_NAME	GENDER	ROLE	DEPT	EXP	COUNTRY	CONTINENT	SALARY	EMP_RATING	MANAGER_ID	PROJ_ID
E052	Dianna	Wilson	F	SENIOR DATA SCIENTIST	HEALTHCARE	6	CANADA	NORTH AMERICA	5500	5	E083	P103
E057	Dorothy	Wilson	F	SENIOR DATA SCIENTIST	HEALTHCARE	9	USA	NORTH AMERICA	7700	1	E083	P302
E083	Patrick	Voltz	M	MANAGER	HEALTHCARE	15	USA	NORTH AMERICA	9500	5	E001	NULL
E505	Chad	Wilson	M	ASSOCIATE DATA SCIENTIST	HEALTHCARE	5	CANADA	NORTH AMERICA	5000	2	E083	P103
E005	Eric	Hoffman	M	LEAD DATA SCIENTIST	FINANCE	11	USA	NORTH AMERICA	8500	3	E103	P105
E103	Emily	Grove	F	MANAGER	FINANCE	14	CANADA	NORTH AMERICA	10500	4	E001	NULL
E403	Steve	Hoffman	M	ASSOCIATE DATA SCIENTIST	FINANCE	4	USA	NORTH AMERICA	5000	3	E103	P105

Query End

7. WRITE A QUERY TO LIST 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.

➔ QUERY:

```
Select e.emp_id, e.first_name, e.last_name, e.role,
e.dept, e.emp_rating, m.max_rating
     From emp_record_table as e
    JOIN (
    Select dept, MAX(emp_rating) as max_rating
    from emp_record_table
    group by dept
    ) m ON e.dept = m.dept;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	first_name	last_name	role	dept	emp_rating	max_rating
E001	Arthur	Black	PRESIDENT	ALL	5	5
E005	Eric	Hoffman	LEAD DATA SCIENTIST	FINANCE	3	4
E010	William	Butler	LEAD DATA SCIENTIST	AUTOMOTIVE	2	5
E052	Dianna	Wilson	SENIOR DATA SCIENTIST	HEALTHCARE	5	5
E057	Dorothy	Wilson	SENIOR DATA SCIENTIST	HEALTHCARE	1	5
E083	Patrick	Voltz	MANAGER	HEALTHCARE	5	5
E103	Emily	Grove	MANAGER	FINANCE	4	4
E204	Karene	Nowak	SENIOR DATA SCIENTIST	AUTOMOTIVE	5	5
E245	Nian	Zhen	SENIOR DATA SCIENTIST	RETAIL	2	4
E260	Roy	Collins	SENIOR DATA SCIENTIST	RETAIL	3	4
E403	Steve	Hoffman	ASSOCIATE DATA SCIEN...	FINANCE	3	4
E428	Pete	Allen	MANAGER	AUTOMOTIVE	4	5
E478	David	Smith	ASSOCIATE DATA SCIEN...	RETAIL	4	4
E505	Chad	Wilson	ASSOCIATE DATA SCIEN...	HEALTHCARE	2	5
E532	Claire	Brennan	ASSOCIATE DATA SCIEN...	AUTOMOTIVE	1	5
E583	Janet	Hale	MANAGER	RETAIL	2	4
E612	Tracy	Norris	MANAGER	RETAIL	4	4
E620	Katrina	Allen	JUNIOR DATA SCIENTIST	RETAIL	1	4
E640	Jenifer	Jhones	JUNIOR DATA SCIENTIST	RETAIL	4	4

Query End

8. WRITE A QUERY TO CALCULATE THE MINIMUM AND THE MAXIMUM SALARY OF THE EMPLOYEES IN EACH ROLE. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY: Select role, MIN(Salary) as min_salary, MAX(Salary) as max_salary
from emp_record_table
group by role;

role	min_salary	max_salary
PRESIDENT	16500	16500
LEAD DATA SCIENTIST	8500	9000
SENIOR DATA SCIENTIST	5500	7700
MANAGER	8500	11000
ASSOCIATE DATA SCIENTIST	4000	5000
JUNIOR DATA SCIENTIST	2800	3000

Query End

9. WRITE A QUERY TO ASSIGN RANKS TO EACH EMPLOYEE BASED ON THEIR EXPERIENCE. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY: Select *,

Rank() over (order by EXP DESC) as experience_rank

from emp_record_table;

EMP_ID	FIRST_NAME	LAST_NAME	GENDER	ROLE	DEPT	EXP	COUNTRY	CONTINENT	SALARY	EMP_RATING	MANAGER_ID	PROJ_ID	experience_rank
E001	Arthur	Black	M	PRESIDENT	ALL	20	USA	NORTH AMERICA	16500	5	NULL	NULL	1
E083	Patrick	Voltz	M	MANAGER	HEALTHCARE	15	USA	NORTH AMERICA	9500	5	E001	NULL	2
E103	Emily	Grove	F	MANAGER	FINANCE	14	CANADA	NORTH AMERICA	10500	4	E001	NULL	3
E428	Pete	Allen	M	MANAGER	AUTOMOTIVE	14	GERMANY	EUROPE	11000	4	E001	NULL	3
E583	Janet	Hale	F	MANAGER	RETAIL	14	COLOMBIA	SOUTH AMERICA	10000	2	E001	NULL	3
E612	Tracy	Norris	F	MANAGER	RETAIL	13	INDIA	ASIA	8500	4	E001	NULL	6
E010	William	Butler	M	LEAD DATA SCIENTIST	AUTOMOTIVE	12	FRANCE	EUROPE	9000	2	E428	P204	7
E005	Eric	Hoffman	M	LEAD DATA SCIENTIST	FINANCE	11	USA	NORTH AMERICA	8500	3	E103	P105	8
E057	Dorothy	Wilson	F	SENIOR DATA SCIENTIST	HEALTHCARE	9	USA	NORTH AMERICA	7700	1	E083	P302	9
E204	Karene	Nowak	F	SENIOR DATA SCIENTIST	AUTOMOTIVE	8	GERMANY	EUROPE	7500	5	E428	P204	10
E260	Roy	Collins	M	SENIOR DATA SCIENTIST	RETAIL	7	INDIA	Asia	7000	3	E583	NULL	11
E052	Dianna	Wilson	F	SENIOR DATA SCIENTIST	HEALTHCARE	6	CANADA	NORTH AMERICA	5500	5	E083	P103	12
E245	Nian	Zhen	M	SENIOR DATA SCIENTIST	RETAIL	6	CHINA	ASIA	6500	2	E583	P109	12
E505	Chad	Wilson	M	ASSOCIATE DATA SCIEN...	HEALTHCARE	5	CANADA	NORTH AMERICA	5000	2	E083	P103	14
E403	Steve	Hoffman	M	ASSOCIATE DATA SCIEN...	FINANCE	4	USA	NORTH AMERICA	5000	3	E103	P105	15
E478	David	Smith	M	ASSOCIATE DATA SCIEN...	RETAIL	3	COLOMBIA	SOUTH AMERICA	4000	4	E583	P109	16
E532	Claire	Brennan	F	ASSOCIATE DATA SCIEN...	AUTOMOTIVE	3	GERMANY	EUROPE	4300	1	E428	P204	16
E620	Katrina	Allen	F	JUNIOR DATA SCIENTIST	RETAIL	2	INDIA	ASIA	3000	1	E612	P406	18
E640	Jenifer	Jhones	F	JUNIOR DATA SCIENTIST	RETAIL	1	COLOMBIA	SOUTH AMERICA	2800	4	E612	P406	19

Query End

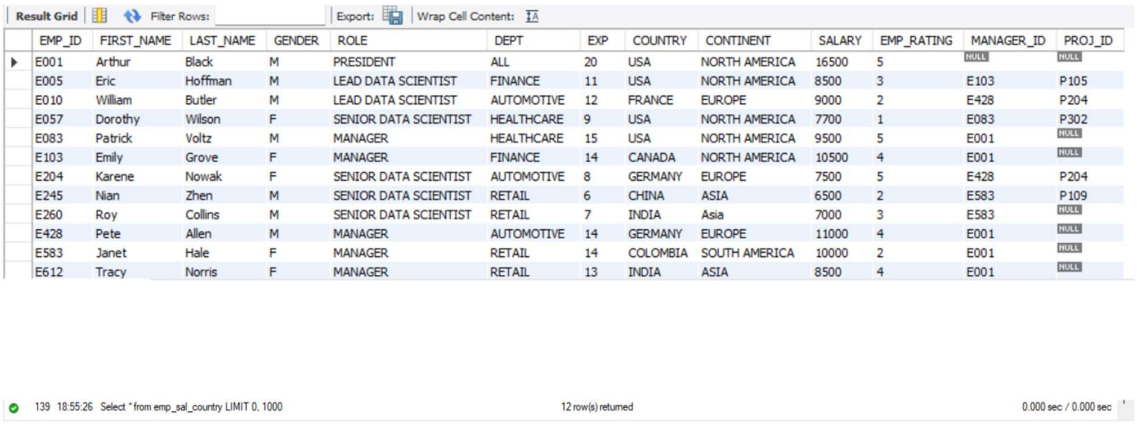
10. WRITE A QUERY TO CREATE A VIEW THAT DISPLAYS EMPLOYEES IN VARIOUS COUNTRIES WHOSE SALARY IS MORE THAN SIX THOUSAND. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY: CREATE VIEW emp_sal_country AS

```
Select *
from emp_record_table
where salary > 6000;
```

■ To check view output

```
Select * from emp_sal_country;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

EMP_ID	FIRST_NAME	LAST_NAME	GENDER	ROLE	DEPT	EXP	COUNTRY	CONTINENT	SALARY	EMP_RATING	MANAGER_ID	PROJ_ID
E001	Arthur	Black	M	PRESIDENT	ALL	20	USA	NORTH AMERICA	16500	5	NULL	NULL
E005	Eric	Hoffman	M	LEAD DATA SCIENTIST	FINANCE	11	USA	NORTH AMERICA	8500	3	E103	P105
E010	William	Butler	M	LEAD DATA SCIENTIST	AUTOMOTIVE	12	FRANCE	EUROPE	9000	2	E428	P204
E057	Dorothy	Wilson	F	SENIOR DATA SCIENTIST	HEALTHCARE	9	USA	NORTH AMERICA	7700	1	E083	P302
E083	Patrick	Voltz	M	MANAGER	HEALTHCARE	15	USA	NORTH AMERICA	9500	5	E001	NULL
E103	Emily	Grove	F	MANAGER	FINANCE	14	CANADA	NORTH AMERICA	10500	4	E001	NULL
E204	Karene	Nowak	F	SENIOR DATA SCIENTIST	AUTOMOTIVE	8	GERMANY	EUROPE	7500	5	E428	P204
E245	Nian	Zhen	M	SENIOR DATA SCIENTIST	RETAIL	6	CHINA	ASIA	6500	2	E583	P109
E260	Roy	Collins	M	SENIOR DATA SCIENTIST	RETAIL	7	INDIA	Asia	7000	3	E583	NULL
E428	Pete	Allen	M	MANAGER	AUTOMOTIVE	14	GERMANY	EUROPE	11000	4	E001	NULL
E583	Janet	Hale	F	MANAGER	RETAIL	14	COLOMBIA	SOUTH AMERICA	10000	2	E001	NULL
E612	Tracy	Norris	F	MANAGER	RETAIL	13	INDIA	ASIA	8500	4	E001	NULL

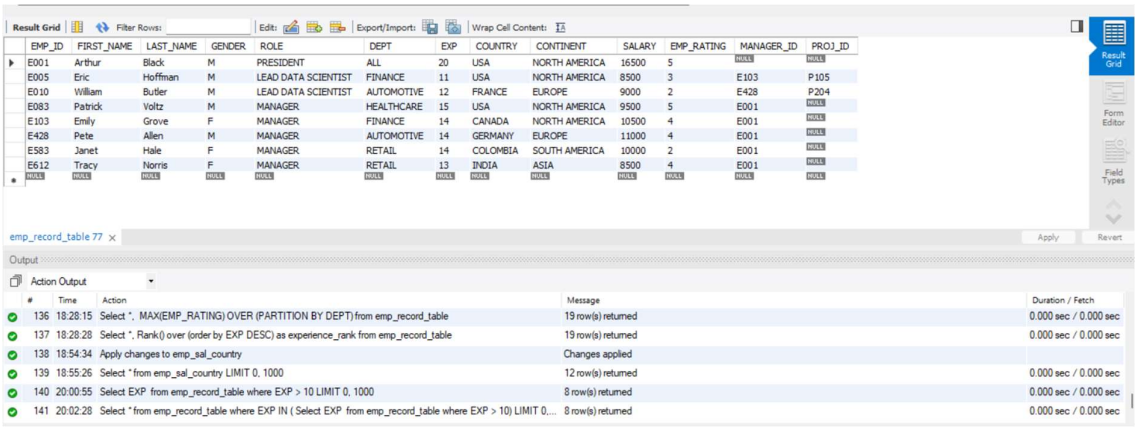
139 18:55:26 Select * from emp_sal_country LIMIT 0, 1000 12 row(s) returned 0.000 sec / 0.000 sec

Query End

11. WRITE A NESTED QUERY TO FIND EMPLOYEES WITH EXPERIENCE OF MORE THAN TEN YEARS. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY:

```
Select *
 from emp_record_table
 where emp_id IN
 (
     Select emp_id
from emp_record_table
where EXP > 10
 );
```



EMP_ID	FIRST_NAME	LAST_NAME	GENDER	ROLE	DEPT	EXP	COUNTRY	CONTINENT	SALARY	EMP_RATING	MANAGER_ID	PROJ_ID
E001	Arthur	Black	M	PRESIDENT	ALL	20	USA	NORTH AMERICA	16500	5	NULL	NULL
E005	Eric	Hoffman	M	LEAD DATA SCIENTIST	FINANCE	11	USA	NORTH AMERICA	8500	3	E103	P105
E010	William	Butler	M	LEAD DATA SCIENTIST	AUTOMOTIVE	12	FRANCE	EUROPE	9000	2	E428	P204
E083	Patrick	Voltz	M	MANAGER	HEALTHCARE	15	USA	NORTH AMERICA	9500	5	E001	NULL
E103	Emily	Grove	F	MANAGER	FINANCE	14	CANADA	NORTH AMERICA	10500	4	E001	NULL
E428	Pete	Allen	M	MANAGER	AUTOMOTIVE	14	GERMANY	EUROPE	11000	4	E001	NULL
E583	Janet	Hale	F	MANAGER	RETAIL	14	COLOMBIA	SOUTH AMERICA	10000	2	E001	NULL
E612	Tracy	Norris	F	MANAGER	RETAIL	13	INDIA	ASIA	8500	4	E001	NULL

#	Time	Action	Message	Duration / Fetch
136	18:28:15	Select *, MAX(EMP_RATING) OVER (PARTITION BY DEPT) from emp_record_table	19 row(s) returned	0.000 sec / 0.000 sec
137	18:28:28	Select *, Rank() over (order by EXP DESC) as experience_rank from emp_record_table	19 row(s) returned	0.000 sec / 0.000 sec
138	18:54:34	Apply changes to emp_sal_country	Changes applied	
139	18:55:26	Select * from emp_sal_country LIMIT 0, 1000	12 row(s) returned	0.000 sec / 0.000 sec
140	20:00:55	Select EXP from emp_record_table where EXP > 10 LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
141	20:02:28	Select * from emp_record_table where EXP IN (Select EXP from emp_record_table where EXP > 10) LIMIT 0,...	8 row(s) returned	0.000 sec / 0.000 sec

Query End

12. 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'.

➔ **Creating Function :**

```
DELIMITER $$

CREATE FUNCTION get_standard_role (EXP INT)
RETURNS VARCHAR(50)
DETERMINISTIC
BEGIN
 DECLARE expected_role VARCHAR(50);

 IF exp <= 2 THEN
  SET expected_role = 'JUNIOR DATA SCIENTIST';
 ELSEIF exp > 2 AND exp <= 5 THEN
  SET expected_role = 'ASSOCIATE DATA
SCIENTIST';
 ELSEIF exp > 5 AND exp <= 10 THEN
  SET expected_role = 'SENIOR DATA SCIENTIST';
 ELSEIF exp > 10 AND exp <= 12 THEN
```

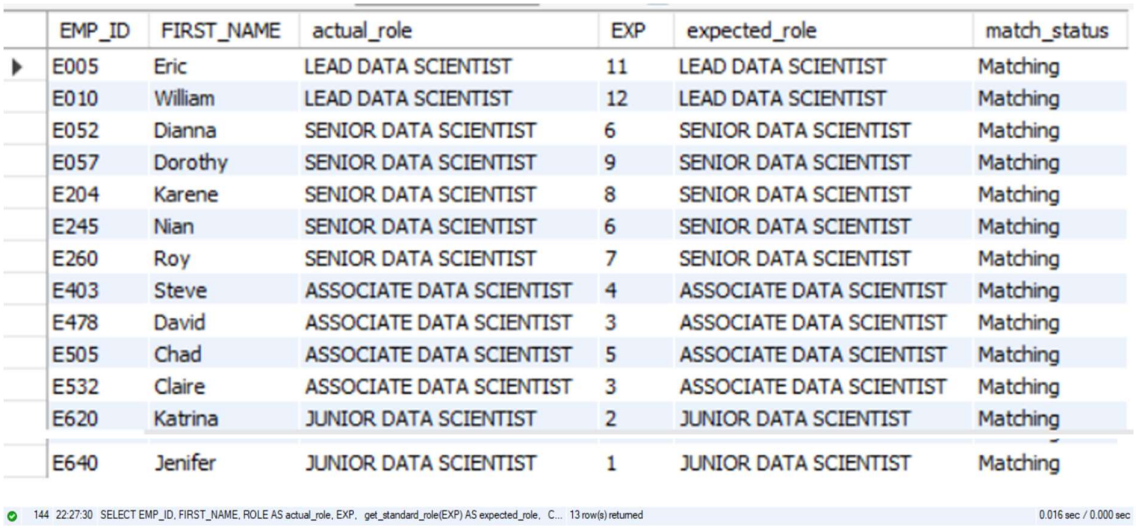
```
    SET expected_role = 'LEAD DATA SCIENTIST';
  ELSEIF exp > 12 AND exp <= 16 THEN
    SET expected_role = 'MANAGER';
  ELSE
    SET expected_role = 'UNKNOWN';
  END IF;

  RETURN expected_role;
END $$

DELIMITER ;
```

➔ QUERY:

```
SELECT EMP_ID, FIRST_NAME, ROLE AS
actual_role, EXP,
  get_standard_role(EXP) AS expected_role,
  CASE
    WHEN ROLE = get_standard_role(EXP) THEN
'Matching'
    ELSE 'Not Matching'
  END AS match_status
FROM data_science_team;
```



EMP_ID	FIRST_NAME	actual_role	EXP	expected_role	match_status
E005	Eric	LEAD DATA SCIENTIST	11	LEAD DATA SCIENTIST	Matching
E010	William	LEAD DATA SCIENTIST	12	LEAD DATA SCIENTIST	Matching
E052	Dianna	SENIOR DATA SCIENTIST	6	SENIOR DATA SCIENTIST	Matching
E057	Dorothy	SENIOR DATA SCIENTIST	9	SENIOR DATA SCIENTIST	Matching
E204	Karene	SENIOR DATA SCIENTIST	8	SENIOR DATA SCIENTIST	Matching
E245	Nian	SENIOR DATA SCIENTIST	6	SENIOR DATA SCIENTIST	Matching
E260	Roy	SENIOR DATA SCIENTIST	7	SENIOR DATA SCIENTIST	Matching
E403	Steve	ASSOCIATE DATA SCIENTIST	4	ASSOCIATE DATA SCIENTIST	Matching
E478	David	ASSOCIATE DATA SCIENTIST	3	ASSOCIATE DATA SCIENTIST	Matching
E505	Chad	ASSOCIATE DATA SCIENTIST	5	ASSOCIATE DATA SCIENTIST	Matching
E532	Claire	ASSOCIATE DATA SCIENTIST	3	ASSOCIATE DATA SCIENTIST	Matching
E620	Katrina	JUNIOR DATA SCIENTIST	2	JUNIOR DATA SCIENTIST	Matching
E640	Jenifer	JUNIOR DATA SCIENTIST	1	JUNIOR DATA SCIENTIST	Matching

144 22:27:30 SELECT EMP_ID, FIRST_NAME, ROLE AS actual_role, EXP, get_standard_role(EXP) AS expected_role, C... 13 row(s) returned 0.016 sec / 0.000 sec

Query End

13. 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.

➔ QUERY:

```
EXPLAIN SELECT * FROM emp_record_table
WHERE FIRST_NAME = 'Eric';
```

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	emp_record_table	NULL	ALL	NULL	NULL	NULL	NULL	19	10.00	Using where

➔ QUERY:

```
CREATE INDEX idx_first_name ON
emp_record_table (FIRST_NAME);
```

➔ QUERY:

```
EXPLAIN SELECT * FROM emp_record_table
WHERE FIRST_NAME = 'Eric';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

id	select_type	table	partitions	type	possible_keys	key	key_len	ref	rows	filtered	Extra
1	SIMPLE	emp_record_table	NULL	ref	idx_first_name	idx_first_name	183	const	1	100.00	NULL

145	22:32:11	EXPLAIN SELECT * FROM emp_record_table WHERE FIRST_NAME = 'Eric'	1 row(s) returned	0.000 sec / 0.000 sec
146	22:33:37	CREATE INDEX idx_first_name ON emp_record_table (FIRST_NAME)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.094 sec
147	22:33:50	EXPLAIN SELECT * FROM emp_record_table WHERE FIRST_NAME = 'Eric'	1 row(s) returned	0.000 sec / 0.000 sec

Query End

14. 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).

➔ QUERY:

```
Select emp_id, first_name, last_name, salary,
emp_rating,
round(0.05 * salary * emp_rating,2) as BONUS
from emp_record_table;
```

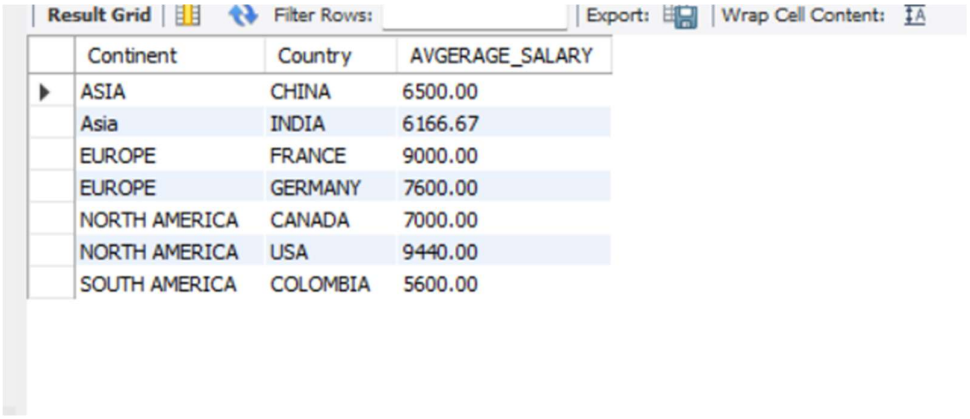
emp_id	first_name	last_name	salary	emp_rating	BONUS
E001	Arthur	Black	16500	5	4125.00
E005	Eric	Hoffman	8500	3	1275.00
E010	William	Butler	9000	2	900.00
E052	Dianna	Wilson	5500	5	1375.00
E057	Dorothy	Wilson	7700	1	385.00
E083	Patrick	Voltz	9500	5	2375.00
E103	Emily	Grove	10500	4	2100.00
E204	Karene	Nowak	7500	5	1875.00
E245	Nian	Zhen	6500	2	650.00
E260	Roy	Collins	7000	3	1050.00
E403	Steve	Hoffman	5000	3	750.00
E428	Pete	Allen	11000	4	2200.00
E478	David	Smith	4000	4	800.00
E505	Chad	Wilson	5000	2	500.00
E532	Claire	Brennan	4300	1	215.00
E583	Janet	Hale	10000	2	1000.00
E612	Tracy	Norris	8500	4	1700.00
E620	Katrina	Allen	3000	1	150.00
E640	Jenifer	Jhones	2800	4	560.00

Query End

15. WRITE A QUERY TO CALCULATE THE AVERAGE SALARY DISTRIBUTION BASED ON THE CONTINENT AND COUNTRY. TAKE DATA FROM THE EMPLOYEE RECORD TABLE.

➔ QUERY:

```
Select Continent, Country,
ROUND(AVG(Salary),2) AS AVGERAGE_SALARY
from emp_record_table
group by CONTINENT,COUNTRY
order by CONTINENT,COUNTRY;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Continent	Country	AVGERAGE_SALARY
ASIA	CHINA	6500.00
Asia	INDIA	6166.67
EUROPE	FRANCE	9000.00
EUROPE	GERMANY	7600.00
NORTH AMERICA	CANADA	7000.00
NORTH AMERICA	USA	9440.00
SOUTH AMERICA	COLOMBIA	5600.00