# **Database Lab**

# **Lab\_4**

**Muhammad Faisal BSCS202110**

## **Task 1:**

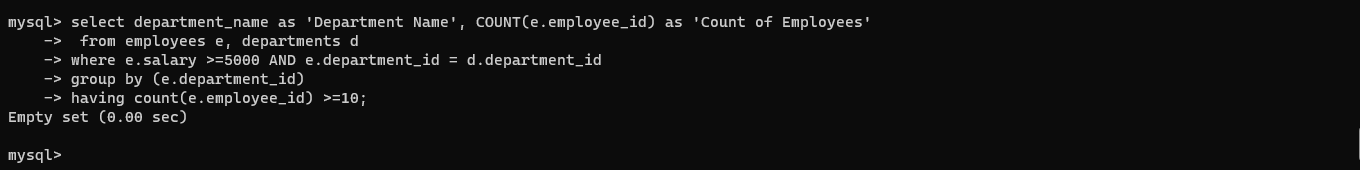
mysql> select department\_name as 'Department Name', COUNT(e.employee\_id) as 'Count of Employees'

-> from employees e, departments d

-> where e.salary >=5000 AND e.department\_id = d.department\_id

-> group by (e.department\_id)

-> having count(e.employee\_id) >=10;



## **Task 2:**

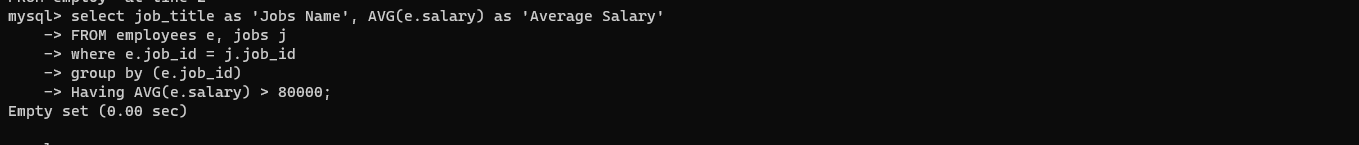
mysql> select job\_title as 'Jobs Name', AVG(e.salary) as 'Average Salary'

-> FROM employees e, jobs j

-> where e.job\_id = j.job\_id

-> group by (e.job\_id)

-> Having AVG(e.salary) > 80000;



## **Task 3:**

mysql> select COUNT(first\_name) as 'Total Number of Employees'

-> From employees

-> Group by (first\_name)

-> HAVING COUNT(first\_name) >=5;



## **Task 4:**

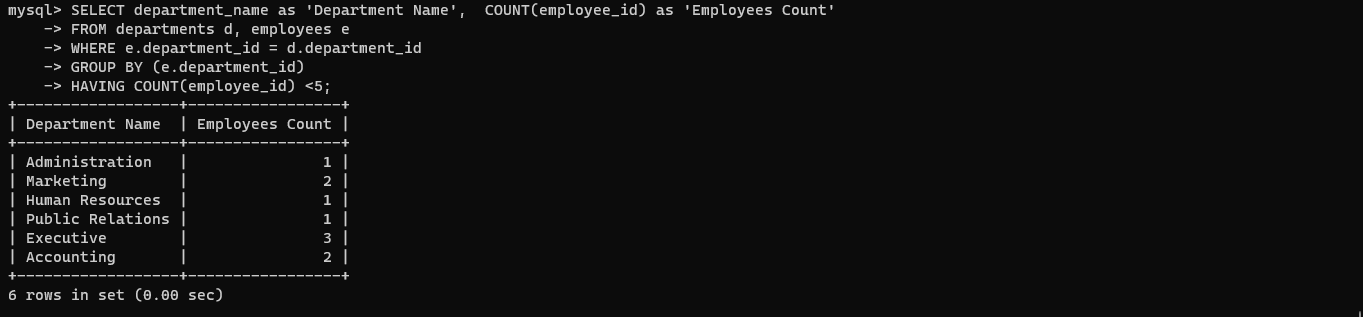
mysql> SELECT department\_name as 'Department Name', COUNT(employee\_id) as 'Employees Count'

-> FROM departments d, employees e

-> WHERE e.department\_id = d.department\_id

-> GROUP BY (e.department\_id)

-> HAVING COUNT(employee\_id) <5;



## **Task 5:**

mysql> SELECT d.department\_name as 'Department Name', MAX(salary) as 'Maximum Salary greater than 50000'

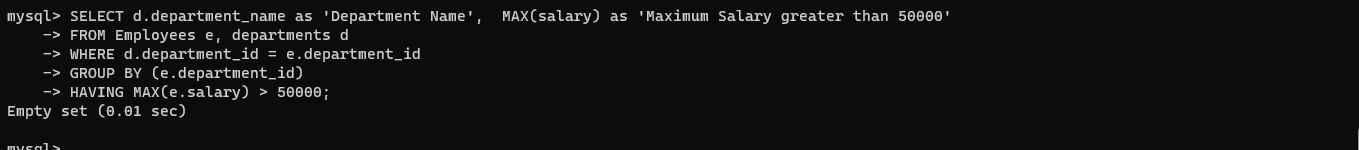
-> FROM Employees e, departments d

-> WHERE d.department\_id = e.department\_id

-> GROUP BY (e.department\_id)

-> HAVING MAX(e.salary) > 50000;

Empty set (0.01 sec)



## **Task 6:**

## mysql> SELECT d.department\_name as 'Department Name', AVG(salary) as 'Maximum Salary between 50000 and 70000'

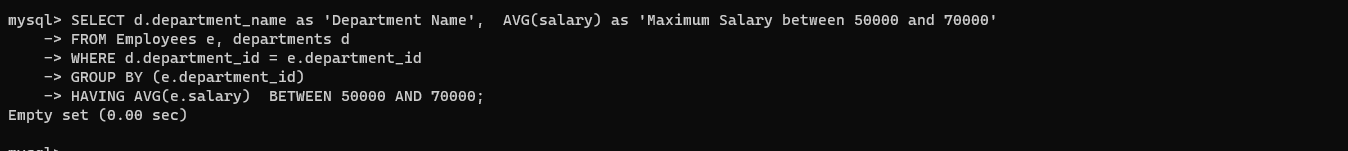
## -> FROM Employees e, departments d

## -> WHERE d.department\_id = e.department\_id

## -> GROUP BY (e.department\_id)

## -> HAVING AVG(e.salary) BETWEEN 50000 AND 70000;

## 



## 

## **Task 7:**

mysql> SELECT country\_name as 'Country Name', Count(c.country\_id) as 'Count of Employees'

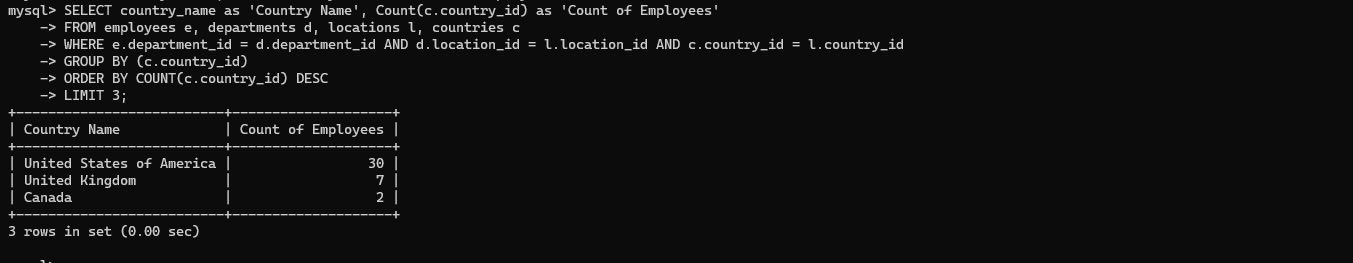
-> FROM employees e, departments d, locations l, countries c

-> WHERE e.department\_id = d.department\_id AND d.location\_id = l.location\_id AND c.country\_id = l.country\_id

-> GROUP BY (c.country\_id)

-> ORDER BY COUNT(c.country\_id) DESC

-> LIMIT 3;



## **Task 8:**

mysql> select department\_name as 'Department Name', COUNT(e.employee\_id) as 'Count of Employees'

-> from employees e, departments d

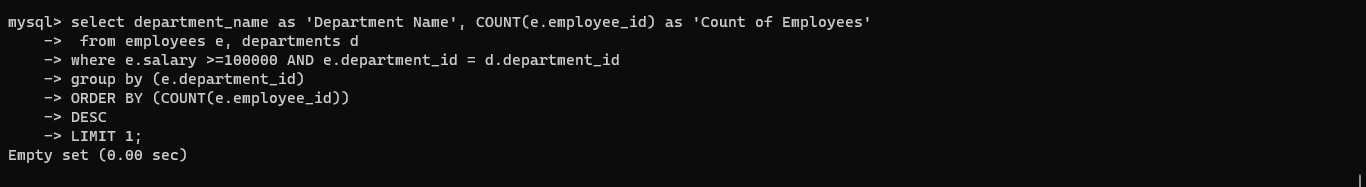
-> where e.salary >=100000 AND e.department\_id = d.department\_id

-> group by (e.department\_id)

-> ORDER BY (COUNT(e.employee\_id))

-> DESC

-> LIMIT 1;

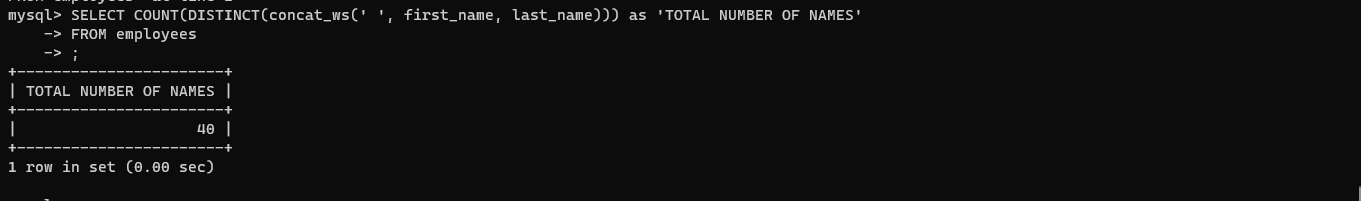


## **Task 9:**

SELECT COUNT(DISTINCT(concat\_ws(' ', first\_name, last\_name))) as 'TOTAL NUMBER OF NAMES'

-> FROM employees

-> ;



## **Task 10:**

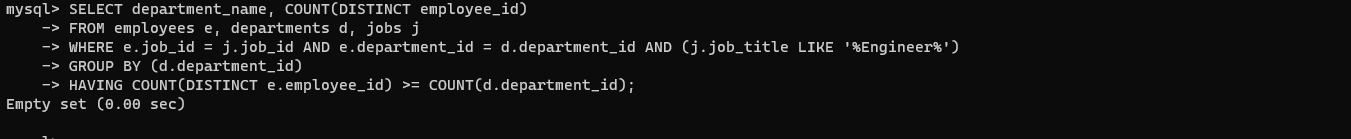
mysql> SELECT department\_name, COUNT(DISTINCT employee\_id)

-> FROM employees e, departments d, jobs j

-> WHERE e.job\_id = j.job\_id AND e.department\_id = d.department\_id AND (j.job\_title LIKE '%Engineer%')

-> GROUP BY (d.department\_id)

-> HAVING COUNT(DISTINCT e.employee\_id) >= COUNT(d.department\_id);

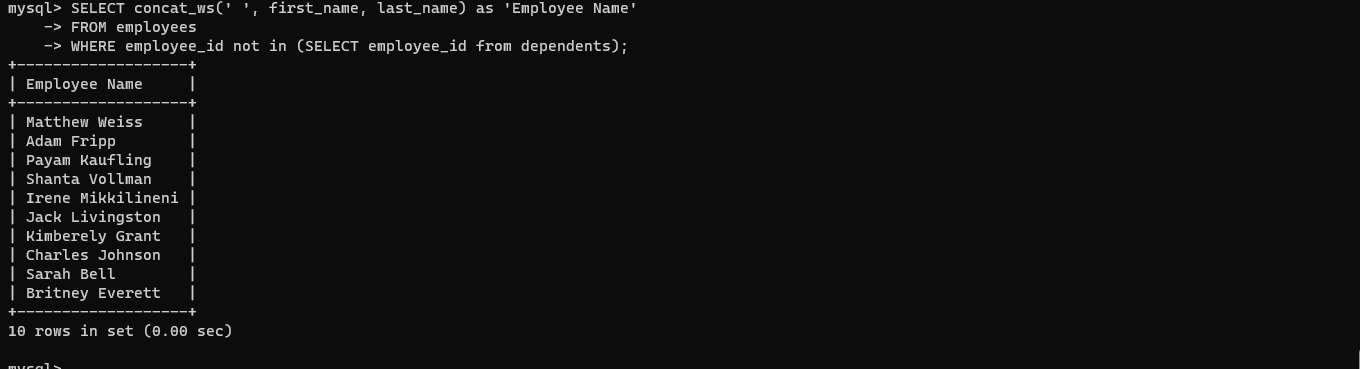


## **Task 11:**

mysql> SELECT concat\_ws(' ', first\_name, last\_name) as 'Employee Name'

-> FROM employees

-> WHERE employee\_id not in (SELECT employee\_id from dependents);



## **Task 12:**

mysql> SELECT AVG(e.salary) as "AVERAGE sALARY", r.region\_name as "Region"

-> from employees e, departments d, locations l, countries c, regions r

-> WHERE e.department\_id = d.department\_id AND d.location\_id = l.location\_id AND l.country\_id = c.country\_id AND c.region\_id = r.region\_id

-> GROUP BY (r.region\_id)

-> HAVING COUNT(c.country\_id) >=2;

