DATABASE : company\_db

TABLE: department

Queries

1. SELECT \* FROM company\_db.department;

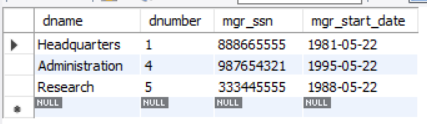


TABLE: dependent

2. SELECT \* FROM company\_db.dependent;

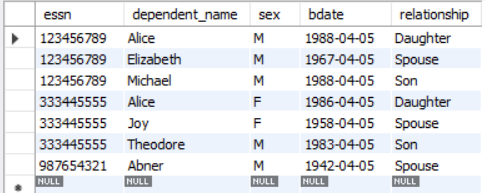


TABLE: dept\_locations

3. SELECT \* FROM company\_db.dept\_locations;

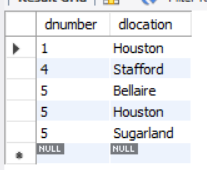


TABLE: employee

4. SELECT \* FROM company\_db.employee;

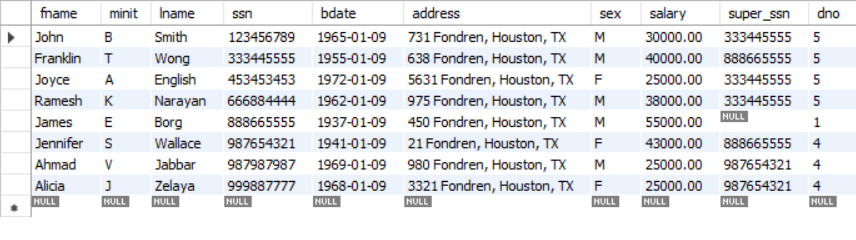


TABLE: works\_on

5. SELECT \* FROM company\_db.works\_on;

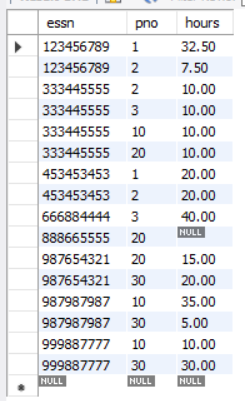
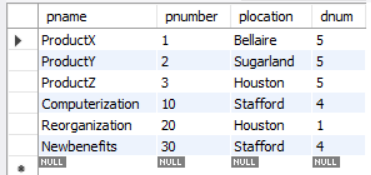


TABLE: project

6. SELECT \* FROM company\_db.project;

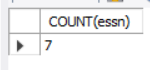


**DATA RETRIEVAL**

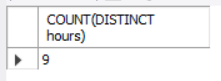
USE company\_db;

1.SELECT \* FROM tablename ;

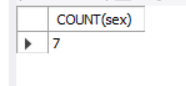
2.SELECT COUNT(essn) FROM works\_on WHERE hours < 13 ;



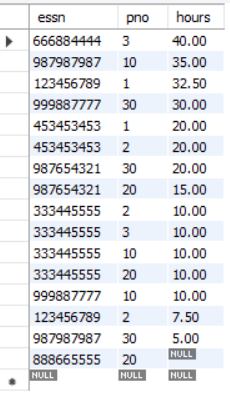
3. SELECT COUNT(DISTINCT hours) FROM works\_on ;



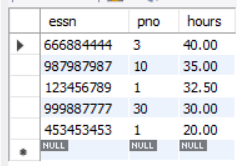
4. SELECT COUNT(sex) FROM dependent ;



5. SELECT \* FROM works\_on ORDER BY hours DESC ;

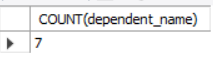


6. SELECT \* FROM works\_on ORDER BY hours DESC LIMIT 5 ;

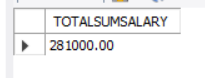


**DATA AGGREGATION (GROUP BY, HAVING, COUNT, SUM, AVG, MIN, MAX)**

1.SELECT COUNT(dependent\_name) FROM dependent ;



2. SELECT SUM(salary) AS TOTALSUMSALARY FROM employee ;

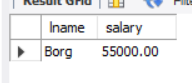


3. SELECT AVG(salary) AS averagesalary FROM employee ;



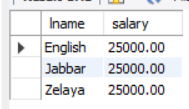
4. SELECT lname,salary FROM employee

WHERE salary =( SELECT MAX(salary) FROM employee ) ;

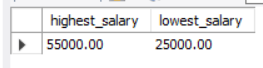


5. SELECT lname,salary FROM employee

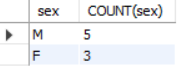
WHERE salary =( SELECT MIN(salary) FROM employee ) ;



6. SELECT MAX(salary) AS highest\_salary , MIN(salary) AS lowest\_salary FROM employee ;



7. SELECT sex ,COUNT(sex) FROM employee GROUP BY sex ;



8. SELECT sex ,COUNT(sex) FROM employee GROUP BY sex

HAVING COUNT(sex) > 4 ;



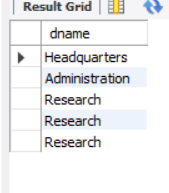
**JOINS (combination of multiple tables)**

**Inner join:**

1. SELECT dname FROM department

INNER JOIN dept\_locations

ON department.dnumber=dept\_locations.dnumber ;



**Outer Joins**

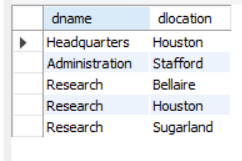
1.Left Inner Join.

SELECT department.dname ,dept\_locations.dlocation

FROM department

LEFT JOIN dept\_locations

ON department.dnumber = dept\_locations.dnumber ;



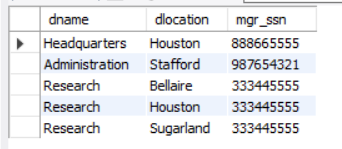
2.Right Inner Join

SELECT department.dname ,dept\_locations.dlocation, department.mgr\_ssn

FROM department

RIGHT JOIN dept\_locations

ON department.dnumber = dept\_locations.dnumber ;



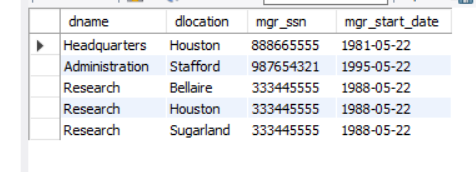
3.Left Outer Join.

SELECT department.dname ,dept\_locations.dlocation, department.mgr\_ssn, department.mgr\_start\_date

FROM department

LEFT OUTER JOIN dept\_locations

ON department.dnumber = dept\_locations.dnumber ;



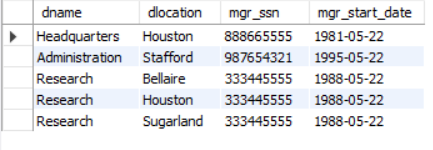
4.Right Outer Join.

SELECT department.dname ,dept\_locations.dlocation, department.mgr\_ssn, department.mgr\_start\_date

FROM department

RIGHT OUTER JOIN dept\_locations

ON department.dnumber = dept\_locations.dnumber ;



**Common Table Expressions (CTEs)**

**1**. WITH male\_employee AS (

SELECT dependent\_name ,bdate

FROM dependent WHERE sex = "M" )

SELECT \* FROM male\_employee ;

