

# **DBMS LAB WEEK8**

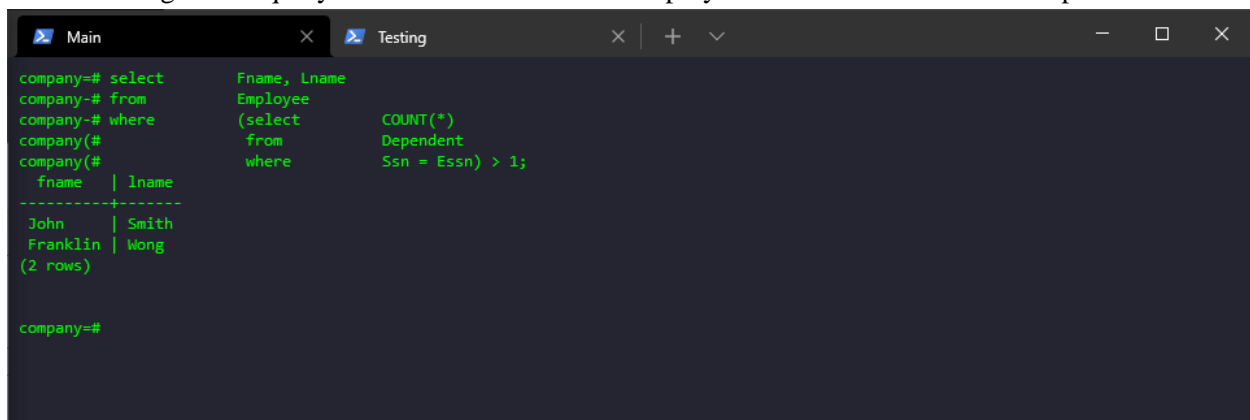
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SECTION B**

SQL – Joins: inner, outer; Sub queries

## **Problem Statement:**

Write the SQL query for the following.

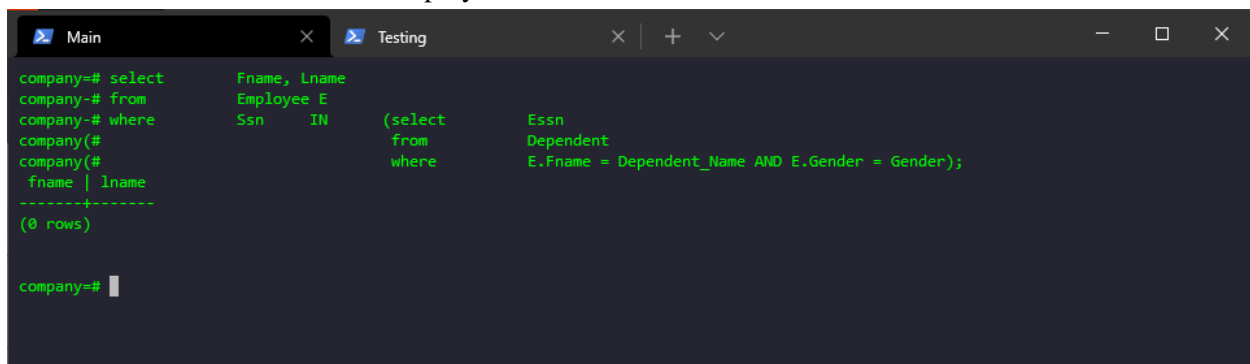
1. Using nested query retrieve the names of all employees who have two or more dependents.



```
company=# select      Fname, Lname
company=# from        Employee
company=# where        (select      COUNT(*)
company=#              from        Dependent
company=#              where       Ssn = Essn) > 1;
 fname | lname
-----+-----
 John  | Smith
Franklin | Wong
(2 rows)

company=#
```

2. Using nested query Retrieve the name of each employee who has a dependent with the same first name and is the same sex as the employee.



```
company=# select      Fname, Lname
company=# from        Employee E
company=# where        Ssn      IN      (select      Essn
company=#              from        Dependent
company=#              where       E.Fname = Dependent_Name AND E.Gender = Gender);
 fname | lname
-----+-----
(0 rows)

company=#
```

3. Using nested query retrieve names of employees whose salary is greater than the salary of all the employees in department 5.

```
company=# select      Fname, Lname
company=# from        Employee
company=# where        Salary > (select      MAX(Salary)
company=#              from        Employee
company=#              where       Dno = 5);
 fname | lname
-----+-----
 James | Borg
Jennifer | Wallace
(2 rows)

company=#
```

4. Retrieve the names of employees who have no dependents.( use Exists/Not Exists)

```
company=# select      Fname, Lname
company=# from        Employee
company=# where        NOT EXISTS (select      *
company=#              from        Dependent
company=#              where       Ssn = Essn);
 fname | lname
-----+-----
 James | Borg
Alicia | Zelaya
Ramesh | Narayan
Joyce  | English
Ahmed  | Jabbar
(5 rows)

company=#
```

5. List the names of managers who have at least one dependent.

```
company=# select      Fname, Lname
company=# from        Employee
company=# where        EXISTS (select      *
company=#              from        Dependent
company=#              where       Ssn = Essn)
company=# AND
company=#              EXISTS (select      *
company=#              from        Department
company=#              where       Ssn = Mgr_ssn);
 fname | lname
-----+-----
Franklin | Wong
Jennifer | Wallace
(2 rows)

company=#
```

6. Using natural Join retrieve the name and address of every employee who works for the 'Research' department.

```
company=# select      Fname, Lname, Address
company=# from        (Employee NATURAL JOIN Department)
company=# where        Dno = Dnumber AND Dname = 'Research';
  fname | lname | address
-----+-----+-----
 John   | Smith | 731 Fondren,Houston,TX
Franklin| Wong  | 638 voss,Houston,TX
Ramesh  | Narayan | 975 Fire Oak, Humble, TX
Joyce   | English | 5631 Rice,Houston,TX
(4 rows)

company=#
```