

Company Database (the provided database) – JOIN Queries

1. Display the department ID, department name, manager ID, and the full name of the manager.

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the database schema, including tables like Departments, Employees, and Projects. The right pane shows a SQL query window with the following query:

```
select D.Dnum,
D.Dname,
D.MGRSSN,
E.Fname+ ' '+E.Lname AS ManagerName
from Departments D join Employee E
on D.MGRSSN=E.SSN
```

The query results are displayed in a table with the following data:

Dnum	Dname	MGRSSN	ManagerName
10	DP1	223344	Kamel Mohamed
20	DP2	968574	Noha Mohamed
30	DP3	512463	Edward Hanna

2. Display the names of departments and the names of the projects they control.

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the database schema, including tables like Departments, Employees, and Projects. The right pane shows a SQL query window with the following query:

```
select
D.Dname,
P.Pname
from Departments D join Project P
on D.Dnum=P.Dnum;
```

The query results are displayed in a table with the following data:

Dname	Pname
DP1	Al Solmaniah
DP1	Al Rabwah
DP1	Al Ramdah
DP2	Al Rowad
DP3	Al Rahab
DP3	Pitcho american
DP2	Ebad El Rahman

3. Display full data of all dependents, along with the full name of the employee they depend on.

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the database structure for 'Company_S0'. The right pane shows a query window with the following SQL code:

```
select
Dep.*
E.Fname+' '+E.LName
from Dependent Dep join Employee E
on Dep.ESSN=E.SSN;
```

The query results are displayed in a table with 8 rows and 5 columns: ESSN, Dependent_name, Sex, Bdate, and (No column name). The data is as follows:

ESSN	Dependent_name	Sex	Bdate	(No column name)
112233	Hala Saad Ali	F	1970-10-18 00:00:00.000	Ali Saad
222344	Ahmed Kamil Shams	M	1988-03-27 00:00:00.000	Kamil Mohamed
221344	Maria Adel Mohamed	F	1975-04-25 00:00:00.000	Kamil Mohamed
321654	Omar Amir Omar	M	1983-03-30 00:00:00.000	Amr Omar
321654	Ramy Amir Omar	M	1980-01-26 00:00:00.000	Amr Omar
321654	Sanaa Gheith	F	1975-05-18 00:00:00.000	Amr Omar
512463	Nora Ghaly	F	1978-06-22 00:00:00.000	Edward Hanna
512463	Sara Edward	F	2001-09-15 00:00:00.000	Edward Hanna

4. Display the project ID, name, and location of all projects located in Cairo or Alex.

The screenshot shows the SQL Server Enterprise Manager interface. The left pane displays the database structure for 'Company_S0'. The right pane shows a query window with the following SQL code:

```
Dep.*
E.Fname+' '+E.LName
from Dependent Dep join Employee E
on Dep.ESSN=E.SSN;

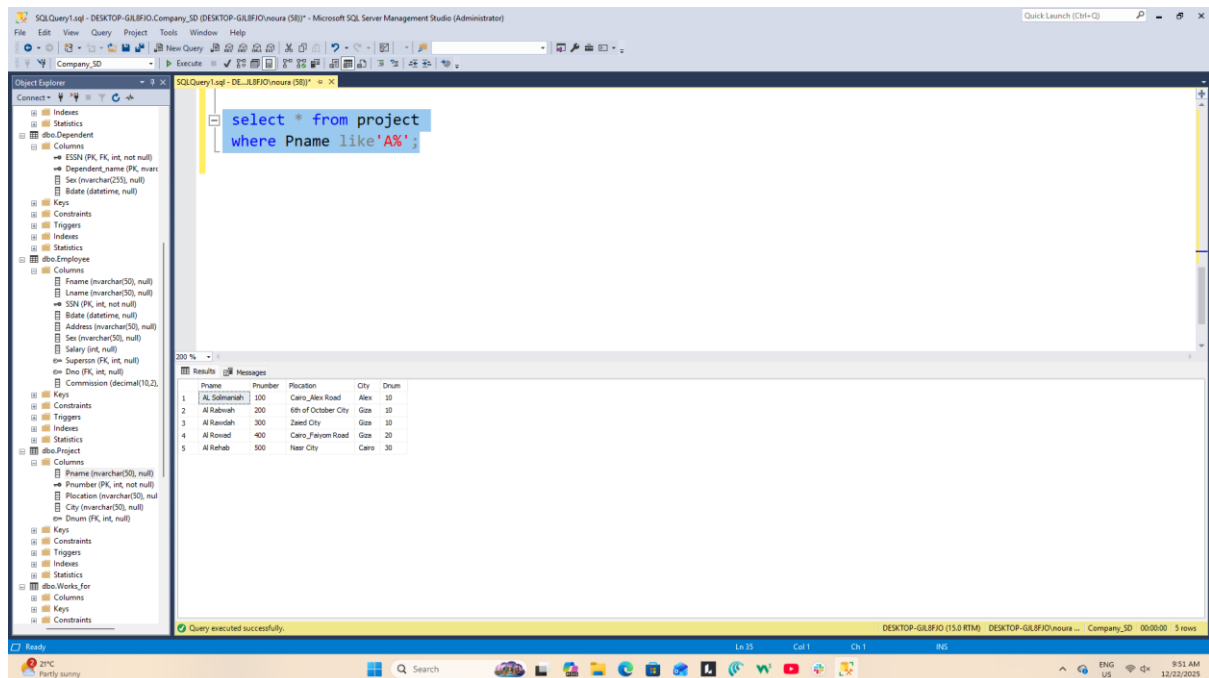
select * from Project

select
PrNumber,
PrName,
PrLocation
from Project
where City in ('Cairo','Alex');
```

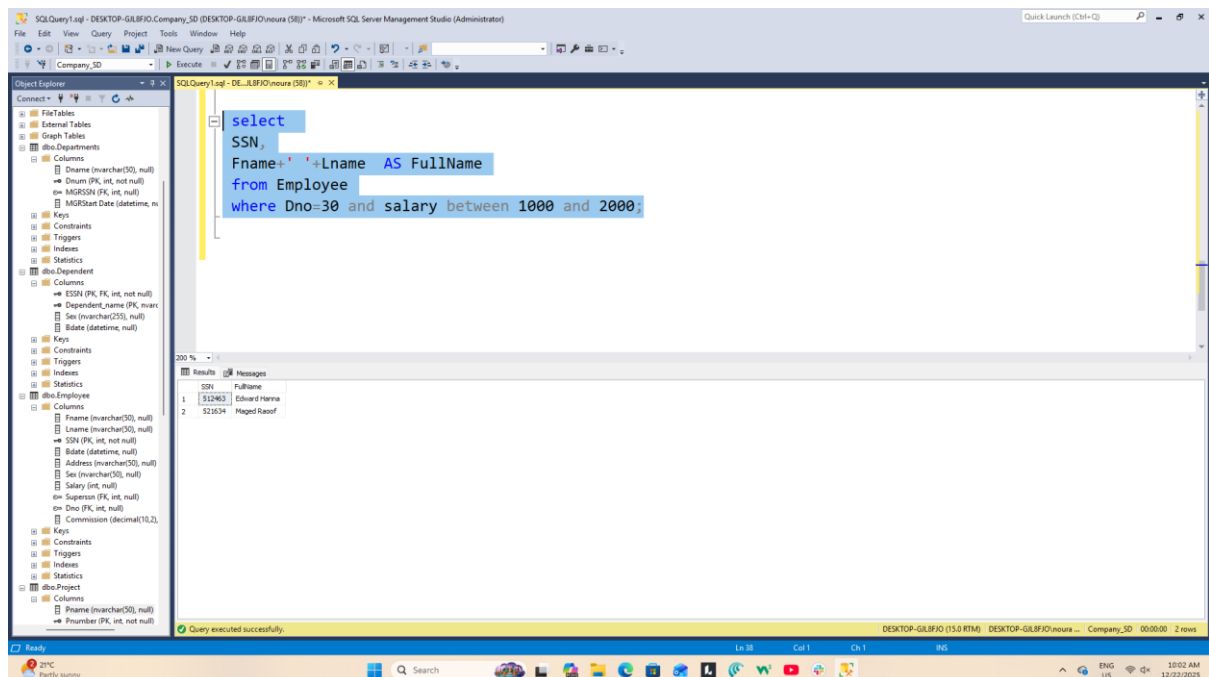
The query results are displayed in a table with 4 rows and 3 columns: PrNumber, PrName, and PrLocation. The data is as follows:

PrNumber	PrName	PrLocation
100	Al Iskhanah	Cairo_Alex Road
500	Al Rehab	New City
600	Pilcho american	Hady
700	Ebad El Rahman	King Road

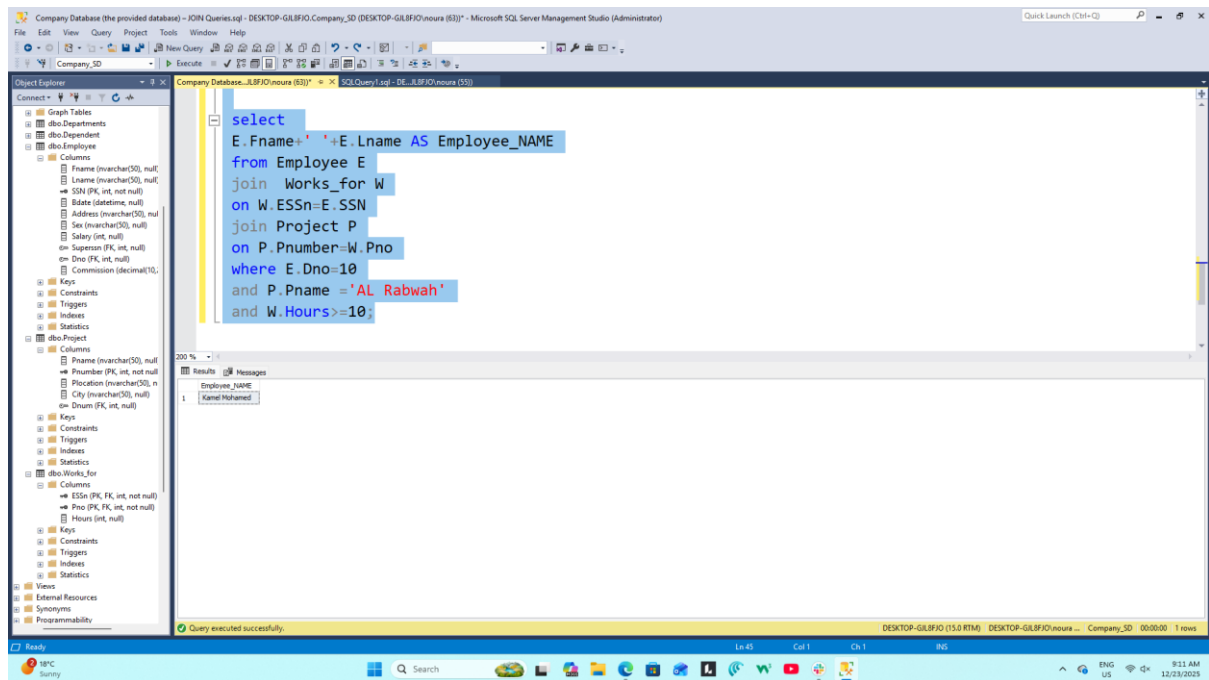
5. Display all project data where the project name starts with the letter 'A'.



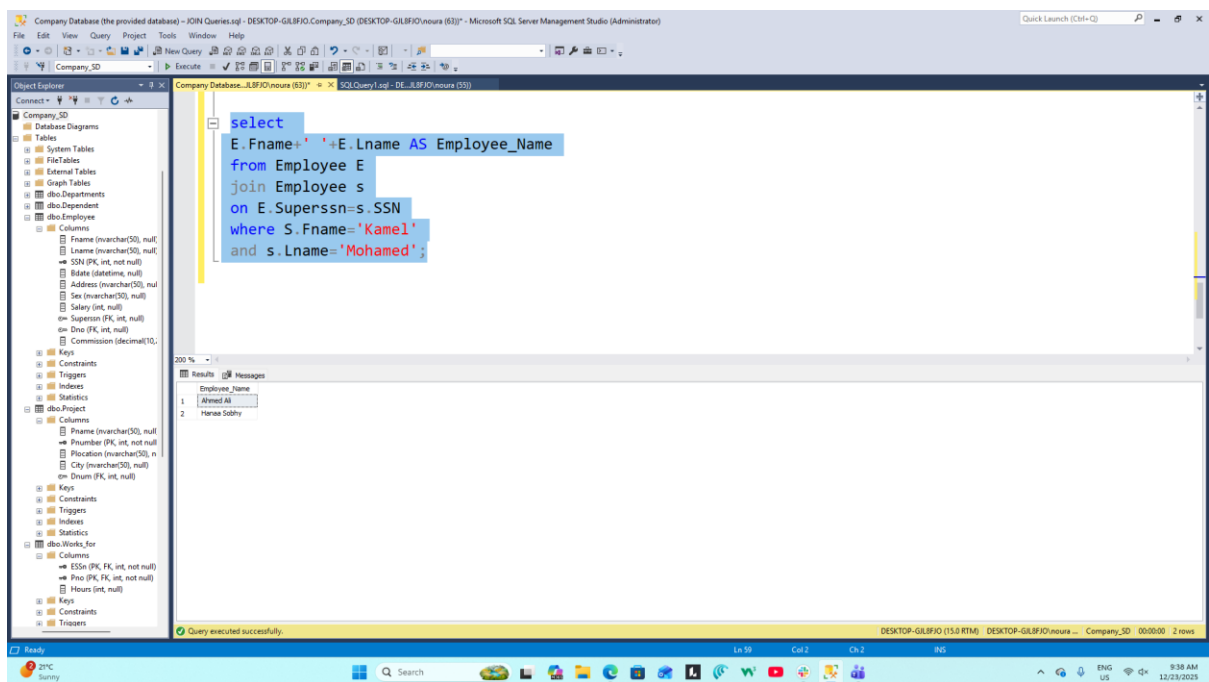
6. Display the IDs and names of employees in department 30 with a salary between 1000 and 2000 LE.



7. Retrieve the names of employees in department 10 who work ≥ 10 hours/week on the "AL Rabwah" project.



8. Find the names of employees who are directly supervised by "Kamel Mohamed".



9. Retrieve the names of employees and the names of the projects they work on, sorted by project name.

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with the 'Company_DB' database selected. The right pane shows a SQL query window with the following query:

```
SELECT E.Fname + ' ' + E.Lname AS EmployeeName,
P.Pname
FROM Employee E
JOIN Works_for W
ON E.SSN = W.ESSN
JOIN Project P
ON W.Pno = P.Pnumber
ORDER BY P.Pname;
```

The 'Results' pane shows the output of the query, displaying a list of employees and their project names. The status bar at the bottom indicates 'Query executed successfully' and '17 rows'.

EmployeeName	Pname
Kamel Mohamed	Al Rabwah
Kamel Mohamed	Al Rabwah
Maged Rasoof	Al Rabwah
Mariam Adel	Al Rabwah
Noha Mohamed	Al Rabwah
Kamel Mohamed	Al Rabwah
Edward Hanna	Al Rabwah
Maged Rasoof	Al Rabwah
Mariam Adel	Al Rabwah
Noha Mohamed	Al Rabwah
Edward Hanna	Al Rabwah
Kamel Mohamed	Al Rabwah
Mariam Adel	Al Rabwah
Noha Mohamed	Al Rabwah
Edward Hanna	Al Rabwah
Maged Rasoof	Al Rabwah

10. For each project located in Cairo, display the project number, controlling department name, manager's last name, address, and birthdate.

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The left pane displays the 'Object Explorer' with the 'Company_DB' database selected. The right pane shows a SQL query window with the following query:

```
SELECT P.Pnumber,
D.Dname,
E.Lname AS ManagerLastName,
E.Address,
E.Bdate
FROM Project P
JOIN Departments D
ON P.Dnum = D.Dnum
JOIN Employee E
ON D.MGRSSN = E.SSN
WHERE P.Plocation = 'Cairo';
```

The 'Results' pane shows the output of the query, displaying a list of projects and their details. The status bar at the bottom indicates 'Query executed successfully' and '0 rows'.

Pnumber	Dname	ManagerLastName	Address	Bdate
---------	-------	-----------------	---------	-------

11. Display all data of managers in the company.

