

SQLQuery1.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\lathi (72)) - Microsoft SQL Server Management Studio (Administrator)

```
--1. Display the department ID, department name, manager ID, and the full name of the manager.
SELECT d.Dname,
       d.MgrSSN,
       e.Fname + ' ' + e.Lname AS Manager_Name
FROM Departments d
JOIN EMPLOYEE e ON d.MgrSSN = e.SSN

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

	Dname	MgrSSN	Manager_Name
1	DP1	22334	Kamel Mohamed
2	DP2	968574	Noha Mohamed
3	DP3	512463	Edward Hanna

Query executed successfully.

SQLQuery1.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\lathi (72)) - Microsoft SQL Server Management Studio (Administrator)

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--1. Display the department ID, department name, manager ID, and the full name of the manager.
SELECT d.Dname,
       d.MgrSSN,
       e.Fname + ' ' + e.Lname AS Manager_Name
FROM Departments d
JOIN EMPLOYEE e ON d.MgrSSN = e.SSN;

--2. Display the names of departments and the names of the projects they control.
SELECT d.Dname,
       p.Pname
FROM Departments d
JOIN PROJECT p ON d.Dnum = p.Dnum
```

	Dname	Pname
1	DP1	Ali Salmaan
2	DP1	Al Nahash
3	DP1	Al Rawish
4	DP2	Al Rowish
5	DP3	Ali Rehab
6	DP3	Rtcho american
7	DP2	Ebad B Rahman

Query executed successfully.

company_SD join.sql - DESKTOP-BLAC2B8R.Company_SD (DESKTOP-BLAC2B8R\fatih (68)) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

company_SD [master]...[LAC2B8R\fatih (68)]* ->

```
SELECT d.Dname,
       d.Dname,
       d.Dname,
       e.Fname + ' ' + e.Lname AS Manager_Name
  FROM Departments d
  JOIN EMPLOYEE e ON d.DgPrSN = e.SSN;

--2. Display the names of departments and the names of the projects they control.
SELECT d.Dname,
       p.Pname
  FROM Departments d
  JOIN PROJECT p ON d.Dnum = p.Dnum;

--3. Display full data of all dependents, along with the full name of the employee they depend on.
SELECT dep.ESSN,
       dep.Fname + ' ' + dep.Lname AS Employee_Name
  FROM DEPENDENT dep
  JOIN EMPLOYEE e ON dep.ESSN = e.SSN;
-----  
SELECT * FROM Departments;
SELECT * FROM Employees;
SELECT * FROM Project;
SELECT * FROM Dependent;
```

Results Messages

	ESSN	Dependent_Lname	Sex	Bdate	Employee_Name
1	112233	Hala Saeed Ali	F	1970-10-18 00:00:00.000	Ahmed Ali
2	223344	Ahmed Kamel Shawki	M	1998-03-27 00:00:00.000	Kamel Mohamed
3	223344	Mona Adel Mohamed	F	1975-04-25 00:00:00.000	Kamel Mohamed
4	321654	Omar Amr Oman	M	1993-03-30 00:00:00.000	Amr Oman
5	321654	Ramy Amr Oman	M	1990-01-26 00:00:00.000	Amr Oman
6	321654	Sanaa Gawah	F	1973-05-16 00:00:00.000	Amr Oman
7	912463	Nora Ghaly	F	1976-06-22 00:00:00.000	Edward Hanna
8	912463	Sara Edward	F	2001-09-15 00:00:00.000	Edward Hanna

Query executed successfully.

DESKTOP-BLAC2B8R (15.0 RTM) DESKTOP-BLAC2B8R\fatih... Company_SD 00:00:00 Brows

Ready

18°C Mostly sunny

Search

Ln 18 Col 1 Ch 1 RS

8:24 AM 12/23/2023 ENG

The screenshot shows a Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection is to 'company_SD join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fatih (68)) - Microsoft SQL Server Management Studio (Administrator)'. The left sidebar shows the Object Explorer with databases like 'company_SD' and 'tempDB'. The main window displays a query editor with T-SQL code and its execution results.

Query Editor Content:

```
company_SD join.sql - LAC28R\fatih (68) - [x]
--1. Display the names of departments and the names of the employees they contain.
SELECT d.Dname, e.Ename
FROM Departments d
JOIN Employee e ON d.HrgSN = e.SSN;

--2. Display the names of departments and the names of the projects they control.
SELECT d.Dname, p.Pname
FROM Departments d
JOIN Project p ON d.Dnum = p.Dnum;

--3. Display full data of all dependents, along with the full name of the employee they depend on.
SELECT dep.Dnum, dep.Essn, e.Ename AS Employee_Name
FROM DEPENDENT dep
JOIN Employee e ON dep.[ESSN] = e.SSN;

--4. Display the project ID, name, and location of all projects located in Cairo or Alex.
SELECT p.Pno, p.Pname, p.City
FROM Project p
WHERE p.City IN ('Cairo', 'Alex');

--5. Display the number of employees per department.
SELECT * FROM Departments;
SELECT * FROM Employee;
SELECT * FROM Project;
SELECT * FROM Dependent;
SELECT * FROM City;
```

Result Grid:

Dnum	Phone	City
10	Al_Solmanah	Alex
30	Al Rehab	Cairo
30	Pitch american	Cairo
20	Ebael El Rahman	Cairo

Status Bar: Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih | Company_SD | 00:00:00 | 4 rows

System Tray: Ready, 18°C Sunny, ENG, Wi-Fi, 8:34 AM, 12/23/2023.

```

company_SD_join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fatih (68)) - Microsoft SQL Server Management Studio (Administrator)
File Edit View Query Project Tools Window Help
[+] Company_SD [+] Execute [+] New Query [+] Run [+] Stop [+] Refresh [+] Save [+] Open [+] Close [+] Minimize [+] Maximize [+] Restore [+] Close
[+] Object Explorer [+] Results [+] Messages
[+] company_SD_join.sql - DESKTOP-BLAC28R\fatih (68) *
Object Explorer
[+] DESKTOP-BLAC28R (SQL Server 15.0.2000.200)
[+] Databases
[+] System Databases
[+] Database Snapshots
[+] ArifinDB
[+] BankingSystem
[+] collage
[+] collageB2
[+] Company_SD
[+] Database Diagrams
[+] Tables
[+] System Tables
[+] FileTables
[+] External Tables
[+] Graph Tables
[+] dbo.Departments
[+] dbo.Dependents
[+] dbo.Employee
[+] dbo.Project
[+] dbo.Works_for
[+] Views
[+] External Resources
[+] Synonyms
[+] Programmability
[+] Service Broker
[+] Storage
[+] Security
[+] companyDatabase
[+] companyDB
[+] Hotel
[+] HotelB2
[+] HotelDB
[+] HotelDB2
[+] LibraryManagementSystem
[+] Security
[+] Server Objects
[+] Replication
[+] PolyBase
[+] Always On High Availability
[+] Management
[+] Integration Services Catalogs
[+] SQL Server Agent (Agent XPs disabled)
[+] Xlvent Profiler
Results
Messages
--2. Display the names of departments and the names of the projects they control.
SELECT d.Dname,
       p.Pname
FROM Departments d
JOIN PROJECT p ON d.Dnum = p.Dnum;
--3. Display full data of all dependents, along with the full name of the employee they depend on.
SELECT dep.*,
       e.Fname + ' ' + e.Lname AS Employee_Name
FROM DEPENDENT dep
JOIN EMPLOYEE e ON dep.ESSN = e.SSN;
--4. Display the project ID, name, and location of all projects located in Cairo or Alex.
SELECT p.Dnum, p.Pname, p.City
FROM Project p
WHERE p.City IN ('Cairo', 'Alex');
--5. Display all project data where the project name starts with the letter 'A'.
SELECT p.*
FROM Project p
WHERE p.Pname LIKE 'A%';
-----
SELECT * FROM Departments;
SELECT * FROM Employee;
Ln 29 Col 1 Ch 1 INS
DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\fatih ... Company_SD 00:00:00 5 rows
12/23/2025 8:42 AM ENG
Ready 18°C Sunny
Query executed successfully.

```

```

company_SD_join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fatih (68)) - Microsoft SQL Server Management Studio (Administrator)
File Edit View Query Project Tools Window Help
[+] Company_SD [+] Execute [+] New Query [+] Run [+] Stop [+] Refresh [+] Save [+] Open [+] Close [+] Minimize [+] Maximize [+] Restore [+] Close
[+] Object Explorer [+] Results [+] Messages
[+] company_SD_join.sql - DESKTOP-BLAC28R\fatih (68) *
Object Explorer
[+] DESKTOP-BLAC28R (SQL Server 15.0.2000.200)
[+] Databases
[+] System Databases
[+] Database Snapshots
[+] ArifinDB
[+] BankingSystem
[+] collage
[+] collageB2
[+] Company_SD
[+] Database Diagrams
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[+] FileTables
[+] External Tables
[+] Graph Tables
[+] dbo.Departments
[+] dbo.Dependents
[+] dbo.Employee
[+] dbo.Project
[+] dbo.Works_for
[+] Views
[+] External Resources
[+] Synonyms
[+] Programmability
[+] Service Broker
[+] Storage
[+] Security
[+] companyDatabase
[+] companyDB
[+] Hotel
[+] HotelB2
[+] HotelDB
[+] HotelDB2
[+] LibraryManagementSystem
[+] Security
[+] Server Objects
[+] Replication
[+] PolyBase
[+] Always On High Availability
[+] Management
[+] Integration Services Catalogs
[+] SQL Server Agent (Agent XPs disabled)
[+] Xlvent Profiler
Results
Messages
--2. Display the names of departments and the names of the projects they control.
SELECT d.Dname,
       p.Pname
FROM Departments d
JOIN PROJECT p ON d.Dnum = p.Dnum;
--3. Display full data of all dependents, along with the full name of the employee they depend on.
SELECT dep.*,
       e.Fname + ' ' + e.Lname AS Employee_Name
FROM DEPENDENT dep
JOIN EMPLOYEE e ON dep.ESSN = e.SSN;
--4. Display the project ID, name, and location of all projects located in Cairo or Alex.
SELECT p.Dnum, p.Pname, p.City
FROM Project p
WHERE p.City IN ('Cairo', 'Alex');
--5. Display all project data where the project name starts with the letter 'A'.
SELECT p.*
FROM Project p
WHERE p.Pname LIKE 'A%';
-----
--6. Display the IDs and names of employees in department 30 with a salary between 1000 and 2000 LE.
SELECT e.SSN, e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
WHERE e.Dnum = 30
AND e.Salary BETWEEN 1000 AND 2000;
-----
SELECT * FROM Departments;
SELECT * FROM Employee;
SELECT * FROM Project;
Ln 34 Col 1 Ch 1 INS
DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\fatih ... Company_SD 00:00:00 2 rows
12/23/2025 8:49 AM ENG
Ready 18°C Sunny
Query executed successfully.

```

company_SD_join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fathi (68)) - Microsoft SQL Server Management Studio (Administrator)

```
--4. Display the project ID, name, and location of all projects located in Cairo or Alex.
SELECT p.Dnum, p.Pname, p.City
FROM Project p
WHERE p.City IN ('Cairo', 'Alex');

--5. Display all project data where the project name starts with the letter 'A'.
SELECT * FROM Project p
WHERE p.Pname LIKE 'A%';

--6. Display the IDs and names of employees in department 30 with a salary between 1000 and 2000 LE.
SELECT e.SSN, e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
WHERE e.Dno LIKE 30
AND e.Salary BETWEEN 1000 AND 2000;

--7. Retrieve the names of employees in department 10 who work ≥ 10 hours/week on the "Al Rahrah" project.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
JOIN Works_for w ON e.SSN = w.ESSn
JOIN Project p ON p.Pnumber = w.Pno
WHERE e.Dno = 10 AND w.Hours >= 10 AND p.Pname = 'Al Rahrah';

-----
```

Results

Employee_Name
Kamel Mohamed

Query executed successfully.

company_SD_join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fathi (68)) - Microsoft SQL Server Management Studio (Administrator)

```
--4. Display the project ID, name, and location of all projects located in Cairo or Alex.
SELECT * FROM Project p
WHERE p.Pname LIKE 'A%';

--5. Display all project data where the project name starts with the letter 'A'.
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SELECT e.SSN, e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
WHERE e.Dno LIKE 30
AND e.Salary BETWEEN 1000 AND 2000;

--7. Retrieve the names of employees in department 10 who work ≥ 10 hours/week on the "Al Rahrah" project.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
JOIN Works_for w ON e.SSN = w.ESSn
JOIN Project p ON p.Pnumber = w.Pno
WHERE e.Dno = 10 AND w.Hours >= 10 AND p.Pname = 'Al Rahrah';

--8. Find the names of employees who are directly supervised by "Kamel Mohamed".
SELECT e.Fname + ' ' + e.Lname AS Supervisor_name
FROM Employee e
JOIN Dependent d ON e.SSN = d.SSN
WHERE d.Fname = 'Kamel' AND d.Lname = 'Mohamed';

-----
```

Results

Employee_Name	Supervisor
Ahmed Ali	Kamel Mohamed
Hania Sibhy	Kamel Mohamed

Query executed successfully.

company_SD_join.sql - DESKTOP-BLAC28R\Company_SD (DESKTOP-BLAC28R\fathi (68)) - Microsoft SQL Server Management Studio (Administrator)

```

--8. Find the names of employees who are directly supervised by "Kamel Mohamed".
SELECT e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e JOIN Works_for w ON e.SSN = w.ESSn
JOIN Project p ON p.Pnumber = w.Pno
WHERE e.Dno = 10 AND w.Hours >=10 AND p.Pname = 'AL Rehabah';

--9. Retrieve the names of employees and the names of the projects they work on, sorted by project name.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name, 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;

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

-----
```

Employee_Name	Pname
Kamel Mohamed	Al Rehabah
Kamel Mohamed	Al Rashed
Maged Raaf	Al Rashed
Maria Adel	Al Rashed
Noha Mohamed	Al Rehabah
Kamel Mohamed	Al Rehabah
Edward Hanna	Al Rehabah
Maged Raaf	Al Rehabah
Maged Raaf	Al Rowad
Maria Adel	Al Rowad
Noha Mohamed	Al Rowad
Rania Mohamed	Al Rehabah
Noha Mohamed	Al Samarah
Maria Adel	Edu B Rehab
Noha Mohamed	Edu B Rehab
Edward Hanna	Ptcho american
Maged Raaf	Ptcho american

Query executed successfully.

company_SD_join.sql - DESKTOP-BLAC28R\Company_SD (DESKTOP-BLAC28R\fathi (68)) - Microsoft SQL Server Management Studio (Administrator)

```

--6. Display the IDs and names of employees in department 30 with a salary between 1000 and 2000 LE.
SELECT e.SSN, e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
WHERE e.Dno LIKE 30
AND e.Salary BETWEEN 1000 AND 2000;

--7. Retrieve the names of employees in department 10 who work ≥ 10 hours/week on the "AL Rehabah" project.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name, e.Pnumber
FROM Employee e JOIN Works_for w ON e.SSN = w.ESSn
JOIN Project p ON p.Pnumber = w.Pno
WHERE e.Dno = 10 AND w.Hours >=10 AND p.Pname = 'AL Rehabah';

--8. Find the names of employees who are directly supervised by "Kamel Mohamed".
SELECT e.Fname + ' ' + e.Lname AS Employee_Name, e.Superssn
FROM Employee e
JOIN Works_for w ON e.SSN = w.ESSn
JOIN Project p ON w.Pno = p.Pnumber
WHERE e.Fname = 'Kamel'
AND e.Lname = 'Mohamed';

--9. Retrieve the names of employees and the names of the projects they work on, sorted by project name.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name, 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;

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

-----
```

Pnumber	Dname	manager_Name	Address	Date
100	DP1	Mohamed	38 Mohy el den abo el Ezz St.Cairo	1970-10-15 00:00:00.000
400	DP2	Mohamed	55 Okt St. El Mohandseen Cairo	1975-01-02 00:00:00.000

Query executed successfully.

company_SD join.sql - DESKTOP-BLAC28R.Company_SD (DESKTOP-BLAC28R\fatih (68)) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

company_SD join.sql - [LAC28R\fatih (68)]

```
company_SD join.sql - [LAC28R\fatih (68)]
```

SELECT e.Fname + ' ' + e.Lname AS Employee_Name, e.SuperSSN
FROM EMPLOYEE e
JOIN DEPARTMENT d ON e.SuperSSN = d.SSN
WHERE s.Fname = 'Kamel'
AND s.Lname = 'Mohamed';

--9. Retrieve the names of employees and the names of the projects they work on, sorted by project name.
SELECT e.Fname + ' ' + e.Lname AS Employee_Name, 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;

--10. For each project located in Cairo, display the project number, controlling department name, manager's last name, address, and birthdate.
SELECT p.Pno, d.Dname, e.Lname AS manager_name, 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';

--11. Display all data of managers in the company.
SELECT DISTINCT e.*
FROM EMPLOYEE e
JOIN DEPARTMENT d ON e.SSN = d.MgrSSN;

--12. Display all employees and their dependents, even if some employees have no dependents.
SELECT e.* , d.Dependent_name
FROM Employee e JOIN Dependent d ON e.SSN = d.SSN;

--13. Display all data of employees in the company.
SELECT * FROM Employees;
SELECT * FROM Employee;
SELECT * FROM Project;
SELECT * FROM Dependent;

100 %

Results Messages

	Frame	Employee_ID	First Name	Last Name	SSN	Date of Birth	Address	Sex	Salary	Supervisor SSN	Department ID	Dependent Name
1	Ahmed	Ali	112233	1965-01-01 00:00:00.000	15 Al Fahmy St Giza	M	1300	223344	NULL	Hala Saed Ali		
2	Kamel	Mohamed	223344	1970-10-15 00:00:00.000	30 Mohy el den abo el Ezz St Cairo	M	1800	321654	10	Ahmed Kamel Shawki		
3	Kamel	Mohamed	223344	1970-10-15 00:00:00.000	30 Mohy el den abo el Ezz St Cairo	M	1800	321654	10	Mona Adel Mohamed		
4	Amer	Omar	321654	1965-09-15 00:00:00.000	44 Hosпис Cairo	M	2500	NULL	NULL	Omar Amer Omar		
5	Amer	Omar	321654	1965-09-14 00:00:00.000	44 Hosпис Cairo	M	2500	NULL	NULL	Ramy Amer Omar		
6	Amer	Omar	321654	1965-09-14 00:00:00.000	44 Hosпис Cairo	M	2500	NULL	NULL	Sara Amer		
7	Edward	Hanna	512463	1972-08-19 00:00:00.000	18 Abaa El Zakaat St. Nasr City Cairo	M	1575	321654	30	Nora Ghaly		
8	Edward	Hanna	512463	1972-08-19 00:00:00.000	18 Abaa El Zakaat St. Nasr City Cairo	M	1575	321654	30	Sara Edward		

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\fatih ... Company_SD 00:00:00 8 rows

11:58 AM 12/23/2023

Ready

24°C Sunny

Search

LN 71 Col 1 Ch 1 INS