



company\_SD join.sql - DESKTOP-BLAC28R.Company\_SD (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.20)

Query: company\_SD join.sql - LAC28R\fatih (800) - X

```

SELECT d.Dnum,
       d.Dname,
       d.HgrSSN,
       e.Name + ' ' + e.LName AS Manager_Name
FROM Departments d
JOIN EMPLOYEE e ON d.HgrSSN = 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,
       e.Name + ' ' + e.LName AS Employee_Name
FROM DEPENDENT dep
JOIN EMPLOYEE e ON dep.[ESSN] = e.SSN;

-----
SELECT * FROM Departments;
SELECT * FROM Employee;
SELECT * FROM Project;
SELECT * FROM Dependent;

```

Results: 8 rows

| ESSN   | Dependent_name     | Sex | Bdate                   | Employee_Name |
|--------|--------------------|-----|-------------------------|---------------|
| 112233 | Hala Saad Ali      | F   | 1970-10-10 00:00:00.000 | Ahmed Ali     |
| 223344 | Ahmed Kamel Shamsi | M   | 1980-03-27 00:00:00.000 | Kamel Mohamed |
| 223344 | Mona Adel Mohamed  | F   | 1975-04-25 00:00:00.000 | Kamel Mohamed |
| 321654 | Omar Amir Osman    | M   | 1993-03-30 00:00:00.000 | Amr Osman     |
| 321654 | Plamy Amir Osman   | M   | 1990-01-26 00:00:00.000 | Amr Osman     |
| 321654 | Sanaa Gamrah       | F   | 1975-09-16 00:00:00.000 | Amr Osman     |
| 512463 | Nora Dady          | F   | 1976-06-22 00:00:00.000 | Edward Hanna  |
| 512463 | Sara Edward        | F   | 2001-09-15 00:00:00.000 | Edward Hanna  |

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\fatih ... Company\_SD 00:00:00 8 rows

company\_SD join.sql - DESKTOP-BLAC28R.Company\_SD (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.20)

Query: company\_SD join.sql - LAC28R\fatih (800) - X

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e.Name + ' ' + e.LName AS Manager_Name
FROM Departments d
JOIN EMPLOYEE e ON d.HgrSSN = 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,
       e.Name + ' ' + 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');

-----
SELECT * FROM Departments;
SELECT * FROM Employee;
SELECT * FROM Project;
SELECT * FROM Dependent;

```

Results: 4 rows

| Dnum | Pname          | City  |
|------|----------------|-------|
| 10   | Al Solmanah    | Alex  |
| 30   | Al Rehab       | Cairo |
| 30   | Ptcho american | Cairo |
| 20   | Ebad B Rahman  | Cairo |

Query executed successfully. DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\fatih ... Company\_SD 00:00:00 4 rows

company\_SD join.sql - DESKTOP-BLAC28R.Company\_SD (DESKTOP-BLAC28R/fatih) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2001.1) | Databases | company\_SD | Tables | dbo | Project | Project

```

--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.Dname = p.Dname;

--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 *
FROM Project p
WHERE p.Pname LIKE 'A%';

SELECT * FROM Departments;
SELECT * FROM Employees;

```

Results: 5 rows

|   | Pname     | Pnumber | Location            | City  | Dnum |
|---|-----------|---------|---------------------|-------|------|
| 1 | Al Sahnah | 100     | Cairo, New Road     | Alex  | 10   |
| 2 | A Rawah   | 200     | 9th of October City | Giza  | 10   |
| 3 | A Rawdah  | 300     | Zayed City          | Giza  | 10   |
| 4 | A Rowad   | 400     | Cairo, Fayoum Road  | Giza  | 20   |
| 5 | A Rehab   | 500     | New City            | Cairo | 30   |

Query executed successfully. DESKTOP-BLAC28R (15.0.2001.1) | DESKTOP-BLAC28R/fatih | Company\_SD | 00:00:00 | 5 rows

company\_SD join.sql - DESKTOP-BLAC28R.Company\_SD (DESKTOP-BLAC28R/fatih) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2001.1) | Databases | company\_SD | Tables | dbo | Project | Project

```

--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.Dname = p.Dname;

--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 *
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 I.E.
SELECT e.SSN, e.Fname + ' ' + e.Lname AS Employee_Name
FROM Employee e
WHERE e.Dno = 30
AND e.Salary BETWEEN 1000 AND 2000;

SELECT * FROM Departments;
SELECT * FROM Employees;
SELECT * FROM Project;

```

Results: 2 rows

|   | SSN    | Employee_Name |
|---|--------|---------------|
| 1 | 512463 | Edward Hanna  |
| 2 | 521634 | Maged Raouf   |

Query executed successfully. DESKTOP-BLAC28R (15.0.2001.1) | DESKTOP-BLAC28R/fatih | Company\_SD | 00:00:00 | 2 rows

company\_3D join.sq - DESKTOP-BLAC2BR.Company\_3D (DESKTOP-BLAC2BR/fathi (86)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC2BR (SQL Server 15C) > Databases > company\_3D > Tables > dbo.Employee

```

--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 2-10 hours/week on the "AL Rabwah" 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.Pro
WHERE e.Dno = 10 AND w.Hours >= 10 AND p.Pname = 'AL Rabwah';

-----
SELECT * FROM Departments;
SELECT * FROM Employees;
SELECT * FROM Projects;
SELECT * FROM Dependents;

```

Results: 1 | Kamel Mohamed

Query executed successfully. DESKTOP-BLAC2BR (15.0 RTM) DESKTOP-BLAC2BR/fathi ... Company\_3D 00:00:00 1 rows

company\_3D join.sq - DESKTOP-BLAC2BR.Company\_3D (DESKTOP-BLAC2BR/fathi (86)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to DESKTOP-BLAC2BR (SQL Server 15C) > Databases > company\_3D > Tables > dbo.Employee

```

--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 2-10 hours/week on the "AL Rabwah" 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.Pro
WHERE e.Dno = 10 AND w.Hours >= 10 AND p.Pname = 'AL Rabwah';

--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 Employee s ON e.SuperSSN = s.SSN
WHERE s.Fname = 'Kamel'
AND s.Lname = 'Mohamed';

-----
SELECT * FROM Departments;
SELECT * FROM Employees;
SELECT * FROM Projects;
SELECT * FROM Dependents;

```

Results: 2 rows

| Employee_Name | SuperSSN |
|---------------|----------|
| Amr Ad        | 223344   |
| Hanaa Sobhy   | 223344   |

Query executed successfully. DESKTOP-BLAC2BR (15.0 RTM) DESKTOP-BLAC2BR/fathi ... Company\_3D 00:00:00 2 rows



company\_SD join.sql - DESKTOP-BLAC28R\Company\_SD (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer: Connect to company\_SD. Server: company\_SD. Database: company\_SD. Tables: dbo.Departments, dbo.Employee, dbo.Project, dbo.Dependent.

```

--7. Retrieve the names of employees in department 10 who work > 10 hours/week on the "AL Rehab" 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 Rehab';

--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 Employee s ON e.SuperSSN = s.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.Pnumber, 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 Departments d ON e.SSN = d.MgrSSN;

```

Results: 3 rows

| Fname  | Lname   | SSN    | Bdate                    | Address                               | Sex | Salary | SuperSSN | Dno |
|--------|---------|--------|--------------------------|---------------------------------------|-----|--------|----------|-----|
| Kamel  | Mohamed | 223344 | 1970-10-15 00:00:00.0000 | 30 Mahy el den abo el Ezz St Cairo    | M   | 1800   | 321654   | 10  |
| Edward | Hanna   | 512463 | 1972-08-19 00:00:00.0000 | 18 Abbas El Sakaad St. Near City Caro | M   | 1575   | 321654   | 30  |
| Naha   | Mohamed | 960574 | 1975-01-02 00:00:00.0000 | 55 Orabi St. El Mohandseen Cairo      | F   | 1600   | 321654   | 20  |

Query executed successfully.

company\_SD join.sql - DESKTOP-BLAC28R\Company\_SD (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

```

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

--13. Display all employees and their dependents, even if some employees have no dependents.
SELECT * FROM Departments;
SELECT * FROM Employee;
SELECT * FROM Project;
SELECT * FROM Dependent;

```

Results: 8 rows

| Fname  | Lname   | SSN    | Bdate                    | Address                               | Sex | Salary | SuperSSN | Dno  | Dependent_name    |
|--------|---------|--------|--------------------------|---------------------------------------|-----|--------|----------|------|-------------------|
| Amr    | Ab      | 112233 | 1965-01-01 00:00:00.0000 | 15 Al fahmy St Giza                   | M   | 1300   | 223344   | NULL | Hala Saad Ab      |
| Kamel  | Mohamed | 223344 | 1970-10-15 00:00:00.0000 | 30 Mahy el den abo el Ezz St Cairo    | M   | 1800   | 321654   | 10   | Ahmed Kamel Shawk |
| Kamel  | Mohamed | 223344 | 1970-10-15 00:00:00.0000 | 30 Mahy el den abo el Ezz St Cairo    | M   | 1800   | 321654   | 10   | Mona Adel Mohamed |
| Amr    | Omar    | 321654 | 1963-09-14 00:00:00.0000 | 44 Haggola Caro                       | M   | 2500   | NULL     | NULL | Omar Amr Omar     |
| Amr    | Omar    | 321654 | 1963-09-14 00:00:00.0000 | 44 Haggola Caro                       | M   | 2500   | NULL     | NULL | Ramy Amr Omar     |
| Amr    | Omar    | 321654 | 1963-09-14 00:00:00.0000 | 44 Haggola Caro                       | M   | 2500   | NULL     | NULL | Sanaa Gawah       |
| Edward | Hanna   | 512463 | 1972-08-19 00:00:00.0000 | 18 Abbas El Sakaad St. Near City Caro | M   | 1575   | 321654   | 30   | Nora Ghaly        |
| Edward | Hanna   | 512463 | 1972-08-19 00:00:00.0000 | 18 Abbas El Sakaad St. Near City Caro | M   | 1575   | 321654   | 30   | Sara Edward       |

Query executed successfully.