

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih (65)) - Microsoft SQL Server Management Studio (Administrator)

```
-- Join
-- -----
-- SELECT D.DepID, D.DepName, F.FacName AS FacultyName
FROM Department1 D, Faculty F
where F.FDepartment = D.DepName
```

Results Messages

DepID	DepName	FacultyName
1	Computer Science	Ali Hassan
2	Mathematics	Sara Ahmed
3	Physics	Dear World
4	Chemistry	Lala Sad
5	Biology	Nour Jamal

Query executed successfully.

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih (65)) - Microsoft SQL Server Management Studio (Administrator)

```
-- Insert your code here
-- -----
-- INSERT INTO Student (StudID, FName, LName, EnrollmentDate, Status, GPA, Advisor)
VALUES (300045, 'Fatihya', 'AlFahad', '2025-01-01', 'Active', 3.6, 'Dr. Advisor');
-- 15. Insert Friend with GPA and Advisor NULL
-- INSERT INTO Friend (StudentID, FName, LName, EnrollmentDate, Status, GPA, Advisor)
VALUES (300045, 'Neurul', 'AlHassan', '2025-01-01', 'Active', NULL, NULL);
-- 16. Increase your GPA by 0.2
UPDATE Student SET GPA = GPA + 0.2 WHERE StudID = 300045;
-- 17. Set GPA to 2.0 for students below 2.0
UPDATE Student SET GPA = 2.0 WHERE GPA < 2.0;
-- 18. Increase GPA by 0.1 for students enrolled before 2020
UPDATE Student SET GPA = GPA + 0.1 WHERE EnrollmentDate < '2020-01-01';
-- -----
-- Join
-- -----
-- SELECT D.DepID, D.DepName, F.FacName AS FacultyName
FROM Department1 D, Faculty F
where F.FDepartment = D.DepName;
```

```
-- SELECT C.CourseName, D.DepName
FROM Course C, Department1 D
where C.DepID = D.DepID;
```

Results Messages

CourseName	DepName
Computer Science	Computer Science
Mathematics	Mathematics
Physics	Physics
Chemistry	Chemistry
Biology	Biology

Query executed successfully.

```
-- 15. Insert friend with GPA and Advisor NULL
INSERT INTO Student (StudID, Fname, Lname, EnrollmentDate, Status, GPA, Advisor)
VALUES (300045, 'Noura', 'AlMaskari', '2025-01-01', 'Active', NULL, NULL);

-- 16. Increase your GPA by 0.2
UPDATE Student SET GPA = GPA + 0.2 WHERE StudID = 300045;

-- 17. Set GPA to 2.0 for students below 2.0
UPDATE Student SET GPA = 2.0 WHERE GPA < 2.0;

-- 18. Increase GPA by 0.1 for students enrolled before 2020
UPDATE Student SET GPA = GPA + 0.1 WHERE EnrollmentDate < '2020-01-01';

--> =====
--> Join
--> =====

--> SELECT D.DepID, D.DeptName, F.FacName AS FacultyName
--> FROM Department1 D, Faculty F
--> WHERE F.FDepartment = D.DepID;

--> SELECT C.CourseName, D.DeptName
--> FROM Course C, Department D
--> WHERE C.DepID = D.DepID;

--> SELECT S.Fname AS AdvisorName
--> FROM Student S
--> LEFT JOIN faculty SF ON S.StudID = SF.StudID
--> LEFT JOIN Faculty F ON SF.FID = F.FID;
```

Query executed successfully.

```
--> =====
--> Join
--> =====

--> SELECT D.DepID, D.DeptName, F.FacName AS FacultyName
--> FROM Department1 D, Faculty F
--> WHERE F.FDepartment = D.DepID;

--> SELECT C.CourseName, D.DeptName
--> FROM Course C, Department D
--> WHERE C.DepID = D.DepID;

--> SELECT S.Fname AS AdvisorName
--> FROM Student S
--> LEFT JOIN faculty SF ON S.StudID = SF.StudID
--> LEFT JOIN Faculty F ON SF.FID = F.FID;

--> SELECT E.ExamCode AS ClassID, C.CourseName, E.ExamRoom
--> FROM Exam E
--> JOIN ExamCourse EC ON SC.StudID = EC.StudID
--> JOIN Course C ON SC.CourseID = C.CourseID
--> WHERE E.ExamRoom LIKE '3A%' OR E.ExamRoom LIKE '3B%';
```

Query executed successfully.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'collageDB2' on 'DESKTOP-BLAC2B8' (DB2) using 'sa' as the user. The main window has 'Object Explorer' on the left, showing the database structure. A central pane displays a T-SQL query being run against the 'collegeDB2' database. The query includes joins between 'Department', 'Course', 'Student', and 'Faculty' tables, along with various WHERE clauses. Below the query, the 'Results' tab is selected, showing a grid of data with columns: CourseID, CourseName, Duration, and DepID. The data returned is:

CourseID	CourseName	Duration	DepID
1	Mathematics	3	2
2	Physics	2	2

At the bottom, a status bar shows 'Query executed successfully.' The system tray at the bottom left shows the date and time as '12/21/2023 24:00'. The bottom right corner shows the taskbar with icons for File Explorer, Edge, and File Manager.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'collegeDB2' on 'DESKTOP-BLAC2B8' (DESKTOP-BLAC2B8\fatih (65))'. The Query Editor window contains several T-SQL queries. The first query selects faculty names from 'Faculty' and 'Department' tables. The second query selects course names and department names from 'Course' and 'Department' tables. The third query selects student names and advisor names from 'Student' and 'Faculty' tables. The fourth query selects exam codes, class IDs, course names, and exam rooms from 'Exam' and 'Course' tables, filtered by exam room like 'MAS' or 'NES'. The fifth query selects student names and course names from 'Student' and 'Course' tables, filtered by course name like 'MIS'. The sixth query selects student names and GPA from 'Student' and 'SC' tables, filtered by GPA between 2.5 and 3.5. The Results pane at the bottom shows the output of the last query, which is a table with columns 'Name' and 'GPA', containing one row: 'Fatma ALBASUHI' with a GPA of 3.5.

Name	GPA
Fatma ALBASUHI	3.5

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

collageDB2

```
college DB2.sql - D:\BLAC28R\fatih (65) - Microsoft SQL Server Management Studio (Administrator)

--SELECT S.Fname, S.Lname
--FROM Student S
--JOIN studCourse SC ON S.StudID = SC.StudID
--JOIN Course C ON SC.CourseID = C.CourseID
--WHERE C.CourseName = 'Math' AND E.ExamRoom LIKE 'MAN';

--SELECT *
--FROM Course
--WHERE CourseName LIKE 'MAN';

--SELECT S.Fname, S.Lname
--FROM Student S
--JOIN studCourse SC ON S.StudID = SC.StudID
--JOIN Course C ON SC.CourseID = C.CourseID
--WHERE C.CourseName = 'Computer Science'
--AND SC.Grade >= 90;
```

Results

Frame	Lname
1	Ashu AlHethy

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... | collegeDB2 | 00:00:00 | 1 rows

Ready 24°C Sunny

Ln 347 Col 1 Ch 1 INS

3:18 PM 12/21/2025

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

Object Explorer

collageDB2

```
college DB2.sql - D:\BLAC28R\fatih (65) - Microsoft SQL Server Management Studio (Administrator)

--SELECT S.Fname, S.Lname
--FROM Student S
--JOIN studCourse SC ON S.StudID = SC.StudID
--JOIN Course C ON SC.CourseID = C.CourseID
--WHERE C.Examination LIKE 'MAN' OR E.ExamRoom LIKE 'MAN';

--SELECT *
--FROM Course
--WHERE CourseName LIKE 'MAN';

--SELECT S.Fname, S.Lname
--FROM Student S
--JOIN studCourse SC ON S.StudID = SC.StudID
--JOIN Course C ON SC.CourseID = C.CourseID
--WHERE SC.CourseID = 3
--AND S.GPA BETWEEN 2.5 AND 3.5;

--SELECT S.Fname, S.Lname
--FROM Student S
--JOIN studCourse SC ON S.StudID = SC.StudID
--JOIN Course C ON SC.CourseID = C.CourseID
--WHERE C.CourseName = 'Computer Science'
--AND SC.Grade >= 90;

--SELECT Frame, Lname
--FROM Student
--WHERE Advisor = 'Dr. Laila';
```

Results

Frame	Lname
1	AlRashdi

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fatih ... | collegeDB2 | 00:00:00 | 1 rows

Ready 24°C Sunny

Ln 354 Col 1 Ch 1 INS

3:22 PM 12/21/2025

```

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih (65)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer
File Edit View Query Project Tools Window Help
Connect New Query New Item Task List Execute
collageDB2

college DB2.sql - D:\BLAC28R\fatih (65)\* - Microsoft SQL Server Management Studio (Administrator)

--Q10
SELECT S.Fname, S.Lname, C.CourseName
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
WHERE SC.CourseID = 3
AND S.GPA BETWEEN 2.0 AND 3.5;
--Q11
SELECT S.Fname, S.Lname
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
WHERE SC.CourseID = 3
AND SC.Grade >= 90;
--Q12
SELECT S.Fname, S.Lname, C.CourseName
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
ORDER BY C.CourseName;
--Q13
SELECT F.Facename
FROM Faculty F
JOIN Department D ON F.Fdepartment = D.Ddeptname;

```

Results

	Fname	Lname	CourseName
1	Noor	AlAmri	Biology
2	Khalid	ARashid	Chemistry
3	Aisha	Al-Batthy	Computer Science
4	Salem	ASaad	Mathematics
5	Fatima	Abukar	Physics

Query executed successfully.

10. For each class in Building 'Main', retrieve class ID, course name, department name, and faculty name teaching the class.
I have another data in this question

```

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih (65)) - Microsoft SQL Server Management Studio (Administrator)

Object Explorer
File Edit View Query Project Tools Window Help
Connect New Query New Item Task List Execute
collageDB2

college DB2.sql - D:\BLAC28R\fatih (65)\* - Microsoft SQL Server Management Studio (Administrator)

--Q10
SELECT S.Fname, S.Lname, C.CourseName
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
WHERE SC.CourseID = 3
AND S.GPA BETWEEN 2.0 AND 3.5;
--Q11
SELECT S.Fname, S.Lname
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
WHERE SC.CourseID = 3
AND SC.Grade >= 90;
--Q12
SELECT S.Fname, S.Lname, C.CourseName
FROM Student S
JOIN studCourse SC ON S.StudentID = SC.StudentID
JOIN Course C ON SC.CourseID = C.CourseID
ORDER BY C.CourseName;
--Q13
SELECT F.Facename
FROM Faculty F
JOIN Department D ON F.Fdepartment = D.Ddeptname;

```

Results

	Facename
1	Ali Hassan
2	Lala Said
3	Nour Jamal
4	Omar Khalid
5	Sara Ahmed

Query executed successfully.

college DB2.sql - DESKTOP-BLAC28R.collegeDB2 (DESKTOP-BLAC28R\fatih) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

collageDB2

Object Explorer

collage DB2 (D:\BLAC28R\fatih (S))

```

SELECT Fname, Lname
FROM Student S
JOIN StudCourse SC ON S.StudID = SC.StudID
JOIN Course C ON SC.CourseID = C.CourseID
WHERE C.CourseName = 'Computer Science'
AND SC.Grade >= 90;

SELECT S.Fname, S.Lname, C.CourseName
FROM Student S
JOIN StudCourse SC ON S.StudID = SC.StudID
JOIN Course C ON SC.CourseID = C.CourseID
ORDER BY C.CourseName;

SELECT S.Fname, F.Facname AS AdvisorName
FROM Student S
LEFT JOIN faculty SF ON S.StudID = SF.StudID
LEFT JOIN Faculty F ON SF.FID = F.FID;

```

Results Messages

	StudID	Fname	Lname	DOB	HostelID	EnrollmentDate	Status	Advisor	GPA	AdvisorName
1	1	Asha	AlHafthy	2002-05-14	2	2021-09-15	Active	Dr. Ali	3.40	Al Hassan
2	2	Salm	AlSadi	2001-11-22	4	2020-09-01	Active	Dr. Sara	3.60	Sara Ahmed
3	3	Fatima	AlBalushi	2000-02-09	3	2019-07-10	Active	Dr. Dr. Zaid	3.00	Omranahald
4	4	Rashid	AlRashid	2002-01-30	5	2019-07-20	Inactive	Dr. Leila	2.90	Sara Said
5	5	Noor	AlNoor	2003-12-17	1	2021-05-12	Active	Dr. Noor	3.00	Noor Jandif
6	300045	Fatima	AlAhdi	NULL	NULL	2025-01-01	Active	Dr. Advisor	3.00	NULL
7	300046	Noora	AlMaskati	NULL	NULL	2025-01-01	Active	NULL	NULL	NULL

Query executed successfully.