

library.sql - DESKTOP-BLAC28R.LibraryManagementSystem (DESKTOP-BLAC28R\fatih (M)) - Microsoft SQL Server Management Studio (Administrator)

```

SET Status = 'Active';
WHERE Membership_Start_Date >= DATEADD(MONTH, -1, GETDATE());
DELETE FROM Member
WHERE MemberID NOT IN (SELECT DISTINCT MemberID FROM Loan);

-----Join-----
SELECT
    L.LibraryID,
    L.Name AS Library_Name,
    S.Full_Name AS Manager_Name
FROM Library L
JOIN Staff S
ON L.LibraryID = S.LibraryID
WHERE S.Position = 'Library_Manager';

```

Results Messages

	LibraryID	Library_Name	Manager_Name
1	3	Sultan Qaboos Library	Khalid Al Syabi

Query executed successfully.

library.sql - DESKTOP-BLAC28R.LibraryManagementSystem (DESKTOP-BLAC28R\fatih (M)) - Microsoft SQL Server Management Studio (Administrator)

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WHERE Membership_Start_Date >= DATEADD(MONTH, -1, GETDATE());
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-----Join-----
SELECT
    L.LibraryID,
    L.Name AS Library_Name,
    S.Full_Name AS Manager_Name
FROM Library L
JOIN Staff S
ON L.LibraryID = S.LibraryID
WHERE S.Position = 'Library_Manager';

-----Select-----
SELECT
    L.Name AS Library_Name,
    B.Title AS Book_Title
FROM Library L
JOIN Book B
ON L.LibraryID = B.LibraryID
WHERE B.Availability_Status = 1;

```

Results Messages

	Library_Name	Book_Title
1	Cervantes Library	Data Structures in Python
2	Al-Huda Library	Federal Worlds
3	Sultan Qaboos Library	Children Stories

Query executed successfully.

The screenshot shows a Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection is to 'DESKTOP-BLAC28R\LibraryManagementSystem (DESKTOP-BLAC28R\fatih (S))' on 'Microsoft SQL Server Management Studio (Administrator)'. The 'Object Explorer' pane on the left shows the database structure, including 'Schemas', 'Tables', 'Views', 'Procedures', 'Functions', 'Replication', 'PolyBase', 'Always On High Availability', 'Maintenance', and 'Integration Services Catalogs'. A specific query is running in the central pane:

```
library.sql - DESKT... - [Staff S]
--2021-09-10 14:22:55.000
SELECT
    L.Name AS Library_Name,
    B.Title AS Book_Title
FROM Library L
JOIN Book B
ON L.LibraryID = B.LibraryID
WHERE B.Availability_Status = 1;
--2021-09-10 14:22:55.000
SELECT
    M.MemberID,
    M.Full_Name,
    M.Phone_Number,
    L.LoanID,
    L.Loan_Date,
    L.Due_Date,
    L.Return_Date,
    L.Status
FROM Member M
INNER JOIN Loan L
ON M.MemberID = L.MemberID;
```

The results grid displays the following data:

MemberID	Name	Email	Phone_Number	LoanID	Loan_Date	Due_Date	Return_Date	Status
1	Sara Al Rasheed	sara.alrasheed@gmail.com	9711001122	1	2023-12-01	2023-12-15	NULL	Returned
2	Osamah Al Rasheed	osamah.alrasheed@gmail.com	9711002233	2	2023-12-02	2023-12-16	NULL	Issued
3	Laila Al Lawati	laila.lawati@gmail.com	9711003344	3	2023-12-10	2023-12-24	NULL	Issued
405	Fatihya Alahbi	fatihya.alahbi@gmail.com	91234567	4	2025-12-17	2025-12-31	2025-12-17	Returned

At the bottom, a message box says 'Query executed successfully.' The status bar at the bottom right shows 'LN 219 Col 1 Ch 1 RS' and the system clock '8:33 AM 12/22/2023'. The taskbar includes icons for File Explorer, Edge, File Manager, and others.

The screenshot shows the Microsoft SQL Server Management Studio (Administrator) interface. The Object Explorer on the left lists the database structure, including tables like Member, Loan, and Library. The main window displays a query results grid and the underlying T-SQL code.

Object Explorer:

- Connect to Server
- DESKTOP-BLAC28R\Iath (58) - Microsoft SQL Server Management Studio (Administrator)
- File Edit View Query Project Tools Window Help
- LibraryManagementSystem
- New Query
- Execute
- Save
- Copy
- Cut
- Paste
- Find
- Replace
- Properties
- Help

Query Results:

library.sql - DESKTOP-BLAC28R\Iath (58)* - < x

```
H.Phone_Number,
L.LoanID,
L.Loan_Date,
L.Return_Date,
L.Return_Status,
M.Status
FROM Member M
LEFT JOIN Loan L
ON M.MemberID = L.MemberID;
SELECT
B.BookID,
B.Title,
L.Name AS Library_Name,
L.Location
FROM dbo.Book B
JOIN dbo.Library L
ON B.LibraryID = L.LibraryID
WHERE L.Location IN ('Muscat, Oman', 'Nizwa, Oman');
```

Results

BookID	Title	Library_Name	Location
1	Data Structures in Python	Central Library	Muscat, Oman
2	Fictional Worlds	Ji Hajar Library	Nizwa, Oman

Messages

Query executed successfully.

Taskbar:

- Ready
- Tomorrow's low To the record
- Search
- Start
- Task View
- File Explorer
- OneDrive
- Recycle Bin
- Taskbar
- Network
- System
- Help

LN 233 Col 1 Ch 1 INS

DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\Iath ... LibraryManagementSystem 00:00:00 2 rows

8:36 AM 12/22/2023 ENG Wi-Fi 12/22/2023

library.sql - DESKTOP-BLAC28R.LibraryManagementSystem (DESKTOP-BLAC28R\fathi (M)) - Microsoft SQL Server Management Studio (Administrator)

```

SELECT
    B.BookID,
    B.Title,
    L.Name AS Library_Name,
    L.Location
FROM dbo.Book B
JOIN dbo.Library L
ON B.LibraryID = L.LibraryID
WHERE L.Location IN ('Muscat, Oman', 'Nizwa, Oman');

SELECT
    BookID,
    Title,
    Genre,
    Price
FROM Book
WHERE Title LIKE 'ON%'

100 % ▾
Results Messages
BookID Title Genre Price
1 2 Data Structures in Python Reference 300.00

```

Query executed successfully.

library.sql - DESKTOP-BLAC28R.LibraryManagementSystem (DESKTOP-BLAC28R\fathi (M)) - Microsoft SQL Server Management Studio (Administrator)

```

SELECT
    B.BookID,
    B.Title,
    L.Name AS Library_Name,
    L.Location
FROM dbo.Book B
JOIN dbo.Library L
ON B.LibraryID = L.LibraryID
WHERE L.Location IN ('Muscat, Oman', 'Nizwa, Oman');

SELECT
    BookID,
    Title,
    Genre,
    Price
FROM Book
WHERE Title LIKE 'ON%';

SELECT DISTINCT
    M.MemberID,
    M.Full_Name
FROM Loan L
JOIN Book B
ON M.MemberID = L.MemberID
JOIN Book B_BookID
ON L.BookID = B_BookID
WHERE B.Price BETWEEN 100 AND 300

100 % ▾
Results Messages
MemberID Full_Name
1 2 Omar Al Randhi
2 3 Lateef Al Lawati

```

Query executed successfully.

library.sql - DESKTOP-BLAC28R\fathi (S) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

LibraryManagementSystem -> Execute ✓

Object Explorer

Connect -> DESKTOP-BLAC28R (SQL Server 15.0.2000.5) ->

Databases Security Server Objects Replication Polybase Always On High Availability Management Integration Services Catalogs SQL Server Agent (Agent IOPS disabled) XEvent Profiler

Price
FROM Book
WHERE Title LIKE 'DS';

SELECT DISTINCT
M.MemberID,
M.FullName
FROM Member M
JOIN Loan L
ON M.MemberID = L.MemberID
JOIN Book B
ON L.BookID = B.BookID
WHERE B.Price BETWEEN 100 AND 300;

SELECT DISTINCT M.MemberID, M.FullName
FROM Member M
SELECT *
ON M.MemberID = L.MemberID
JOIN Book B
ON L.BookID = B.BookID
WHERE B.Title = 'Data Structures In Python'
AND L.Status = 'Returned';

SELECT DISTINCT M.MemberID, M.FullName
FROM Member M

Results Messages

MemberID	FullName
1	Omar Al Rawasi

Query executed successfully.

DESKTOP-BLAC28R (15.0 RTM) | DESKTOP-BLAC28R\fathi ... | LibraryManagementSystems | 00:00:00 | 1 rows

Ready

27°C Partly sunny

Search

Ln 267 Col 1 Ch 1 RS

9:13 AM 12/22/2023 ENG

library.sql - DESKTOP-BLAC28R\fatih (SQL) - Microsoft SQL Server Management Studio (Administrator)

File Edit View Query Project Tools Window Help

LibraryManagementSystem -> Execute ✓

Object Explorer

Connect -> DESKTOP-BLAC28R\fatih (SQL) <- x

SELECT DISTINCT M.MemberID, M.FullName
FROM Member M
JOIN Loan L
ON M.MemberID = L.MemberID
JOIN Book B
ON L.BookID = B.BookID
WHERE
B.Title = 'Data Structures in Python'
AND L.Status = 'Returned';

SELECT DISTINCT M.MemberID, M.FullName
FROM Member M
JOIN Loan L
ON M.MemberID = L.MemberID
JOIN Book B
ON L.BookID = B.BookID
JOIN Library Lib
ON B.LibraryID = Lib.LibraryID
JOIN Staff S
ON Lib.LibraryID = S.LibraryID
WHERE S.FullName = 'Fatima Al Harthy';

100 %

Results Messages

MemberID	Ful_Name
1	Lail Al Lewali

Query executed successfully.

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

Ready 19°C Partly sunny

Search

9:12 AM 12/23/2023

The screenshot shows the Microsoft SQL Server Management Studio (Administrator) interface. The title bar reads "library.sql - DESKTOP-BLAC28R\LibraryManagementSystem (DESKTOP-BLAC28R\fathi [S]) - Microsoft SQL Server Management Studio (Administrator)". The Object Explorer on the left shows a connection to "DESKTOP-BLAC28R (SQL Server 15.0.2600.6)". The main pane displays a query window titled "library.sql - DESKTOP-BLAC28R\fathi [S]". The query is as follows:

```
SELECT
    M.Full_Name AS Member_Name,
    B.Title AS Book_Title
FROM Member M
JOIN Book B
ON M.MemberID = B.BookID
JOIN Loan L
ON M.MemberID = L.MemberID
JOIN BookID B_BookID ON L.BookID = B_BookID
JOIN Library Lib ON L.LibraryID = Lib.LibraryID
JOIN Staff S ON Lib.LibraryID = S.LibraryID
WHERE S.Full_Name = 'Fatima Al Harthy';

ORDER BY B.Title
```

The results pane shows two rows of data:

Member_Name	Book_Title
Fatima Al Harthy	Data Structures in Python
Laila Al Lewati	Fictional Worlds

At the bottom, a status bar indicates "Query executed successfully." The taskbar at the bottom includes icons for File, Edit, View, Query, Project, Tools, Window, Help, and a Quick Launch search bar. The system tray shows the date and time as "12/22/2023 9:12 AM".

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar reads "library.sql - DESKTOP-BLAC28R\lathi (SQL) - Microsoft SQL Server Management Studio (Administrator)". The Object Explorer on the left shows a connection to "DESKTOP-BLAC28R (SQL Server 15.0.2600.6)". The current database is "LibraryManagementSystem". The Query Editor window contains the following T-SQL code:

```
library.sql - DESKTOP-BLAC28R\lathi (SQL) - Microsoft SQL Server Management Studio (Administrator)

-- Execute [ ] New Query [ ] Run [ ] Stop [ ] Refresh [ ] Save [ ] Save As [ ] Open [ ] Close [ ] Help [ ] Exit [ ] Quick Launch (Ctrl+Q) [ ] 

Object Explorer [ ] File [ ] Edit [ ] View [ ] Query [ ] Project [ ] Tools [ ] Window [ ] Help [ ] 

LibraryManagementSystem [ ] Execute [ ] New Query [ ] Run [ ] Stop [ ] Refresh [ ] Save [ ] Save As [ ] Open [ ] Close [ ] Help [ ] 

library.sql - DESKTOP-BLAC28R\lathi (SQL) > X

Connect - [ ] Help [ ] 
[ ] Database [ ] Security [ ] Server Objects [ ] Replication [ ] Polybase [ ] Always On High Availability [ ] Management [ ] Integration Services Catalogs [ ] SQL Server Agent (Agent XPs disabled) [ ] XEvent Profiler [ ] 

-- SELECT * FROM Book WHERE Title = 'Children Stories';

SELECT
    M.Full_Name AS Member_Name,
    B.Title AS Book_Title
FROM Member M
JOIN Loan L ON M.MemberID = L.MemberID
JOIN Book B ON L.BookID = B.BookID
ORDER BY B.Title;

SELECT
    B.Title,
    L.Name AS Library_Name,
    S.Full_Name AS Manager_Name,
    B.Shelf_Location
FROM Book B
JOIN Library L ON B.LibraryID = L.LibraryID
JOIN Staff S ON L.LibraryID = S.LibraryID
WHERE
    L.Name = 'Sultan Qaboos Library'
    AND S.Position = 'Library Manager';

100 % < | Results [ ] Messages [ ] 

Results [ ] Messages [ ] 

Title Library_Name Manager_Name Shelf_Location
1 Children Stories Sultan Qaboos Library Khalid Al Syabi C3

Query executed successfully.
```

The results pane shows one row of data:

	Title	Library_Name	Manager_Name	Shelf_Location
1	Children Stories	Sultan Qaboos Library	Khalid Al Syabi	C3

The status bar at the bottom indicates "DESKTOP-BLAC28R (15.0 RTM) DESKTOP-BLAC28R\lathi ... LibraryManagementSystem 00:00:00 1 rows". The system tray shows icons for battery (19%), network (Partly sunny), search, and system status.

library.sql - DESKTOP-BLAC28R\LibraryManagementSystem (DESKTOP-BLAC28R\fathi (M)) - Microsoft SQL Server Management Studio (Administrator)

```

SELECT
    B.Title,
    L.Name AS Library_Name,
    S.Full_Name AS Manager_Name,
    S.Shelf_Location
FROM Book B
JOIN Library L
    ON B.LibraryID = L.LibraryID
JOIN Staff S
    ON L.LibraryID = S.LibraryID
WHERE
    L.Name = 'Sultan Qaboos Library'
    AND S.Position = 'Library Manager';

SELECT StaffID, Full_Name, Position
FROM Staff
WHERE Position = 'Library Manager';

```

Results

StaffID	Full_Name	Position
1	Khalid Al Syabi	Library Manager

Query executed successfully.

library.sql - DESKTOP-BLAC28R\LibraryManagementSystem (DESKTOP-BLAC28R\fathi (M)) - Microsoft SQL Server Management Studio (Administrator)

```

SELECT
    M.Member_Name AS Member_Name,
    B.Title AS Book_Title,
    B.Rating,
    B.Comments
FROM Member M
LEFT JOIN Loan L
    ON M.MemberID = L.MemberID
LEFT JOIN Book B
    ON L.BookID = B.BookID;

```

Results

Member_Name	Book_Title	Rating	Comments
Sara Al Maskati	NULL	NULL	NULL
Omar Al Rawahi	Data Structures in Python	5	Excellent book for beginners
Lala Al Landi	Fictional Worlds	4	Very engaging
Fathya Alabd	NULL	NULL	NULL

Query executed successfully.