

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) | Databases | Security | Server Objects | Replication | PolyBase | Always On High Availability | Management | Integration Services Catalogs | SQL Server Agent (Agent XPs disabled) | XEvent Profiler

```

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: 1 row(s)

LibraryID	Library_Name	Manager_Name
3	Sultan Gaboos Library	Khalid Al Syabi

Query executed successfully. DESKTOP-BLAC28R (15.0.876) | DESKTOP-BLAC28R\\fatih | LibraryManagementSystem | 00:00:00 | 1 row(s)

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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
    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 = 3;

```

Results: 3 row(s)

Library_Name	Book_Title
Central Library	Data Structures in Python
Al Hajar Library	Fictional Worlds
Sultan Gaboos Library	Children Stories

Query executed successfully. DESKTOP-BLAC28R (15.0.876) | DESKTOP-BLAC28R\\fatih | LibraryManagementSystem | 00:00:00 | 3 row(s)

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) > Databases > LibraryManagementSystem

```

-- 302H Staff S
-- ON L.LibraryID = S.LibraryID
-- WHERE S.Position = 'Library Manager';

-- 302H Book B
-- ON L.LibraryID = B.LibraryID
-- WHERE B.Availability_Status = 1;

-- 302H Member M
-- ON M.MemberID = L.MemberID
-- LEFT JOIN Loan L
-- ON L.MemberID = L.MemberID;

SELECT
    L.Name AS Library_Name,
    B.Title AS Book_Title,
    M.Full_Name,
    M.Email,
    M.Phone_Number,
    L.LoanID,
    L.Loan_Date,
    L.Due_Date,
    L.Return_Date,
    L.Status
FROM Library L
LEFT JOIN Member M
ON M.MemberID = L.MemberID
LEFT JOIN Loan L
ON L.MemberID = L.MemberID
LEFT JOIN Book B
ON B.LibraryID = L.LibraryID
WHERE B.Availability_Status = 1;

```

Results: 4 rows

MemberID	Full_Name	Email	Phone_Number	LoanID	Loan_Date	Due_Date	Return_Date	Status
1	Sara Al Maskat	sara.maskat@email.com	9711001122	1	2023-12-01	2023-12-15	NULL	Returned
2	Omair Al Rawahi	omair.rawahi@email.com	9711002233	2	2023-12-05	2023-12-19	NULL	Issued
3	Laila Al Lawati	laila.lawati@email.com	9711003344	3	2023-12-10	2023-12-24	NULL	Issued
4	Fathya Al Fahd	fathya.alfahd@email.com	91234567	4	2025-12-17	2025-12-31	2025-12-17	Returned

Query executed successfully.

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) > Databases > LibraryManagementSystem

```

-- 302H Book B
-- ON L.LibraryID = B.LibraryID
-- WHERE B.Availability_Status = 1;

-- 302H Member M
-- ON M.MemberID = L.MemberID
-- LEFT JOIN Loan L
-- ON L.MemberID = L.MemberID;

SELECT
    B.BookID,
    B.Title,
    L.Name AS Library_Name,
    L.Location
FROM Library L
LEFT JOIN Member M
ON M.MemberID = L.MemberID
LEFT JOIN Loan L
ON L.MemberID = L.MemberID
LEFT JOIN Book B
ON B.LibraryID = L.LibraryID
WHERE B.Availability_Status = 1;

```

Results: 2 rows

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

Query executed successfully.

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) | Databases | LibraryManagementSystem

```

-- Query 1: Find books in Muscat, Oman
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', 'Mizwa, Oman');

-- Query 2: Find book details
SELECT
    BookID,
    Title,
    Genre,
    Price
FROM Book
WHERE Title LIKE 'Data';

```

Results: 1 row(s)

BookID	Title	Genre	Price
2	Data Structures in Python	Reference	300.00

Query executed successfully.

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) | Databases | LibraryManagementSystem

```

-- Query 3: Find books in Muscat, Oman
SELECT
    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', 'Mizwa, Oman');

-- Query 4: Find book details
SELECT
    BookID,
    Title,
    Genre,
    Price
FROM Book
WHERE Title LIKE 'Data';

-- Query 5: Find members
SELECT DISTINCT
    M.MemberID,
    M.Full_Name
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;

```

Results: 2 row(s)

MemberID	Full_Name
2	Omar Al Rawahi
3	Laila Al Lawati

Query executed successfully.

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Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) | Databases | LibraryManagementSystem

```

FROM Member M
  2019 Loan L
    ON M.MemberID = L.MemberID
  2019 Book B
    ON L.BookID = B.BookID
  2019 Library Lib
    ON B.LibraryID = Lib.LibraryID
  2019 Staff S
    ON Lib.LibraryID = S.LibraryID
WHERE S.Full_Name = 'Fatima Al Harthy';

SELECT
  M.Full_Name AS Member_Name,
  B.Title AS Book_Title
FROM Member M
  2019 Loan L
    ON M.MemberID = L.MemberID
  2019 Book B
    ON L.BookID = B.BookID
ORDER BY B.Title;

```

Results: 2 rows

Member_Name	Book_Title
1	Children's Stories
2	Children's Stories

Query executed successfully. DESKTOP-BLAC28R (15.0.2000.1) | DESKTOP-BLAC28R\fatih | LibraryManagementSystem | 00:00:00 | 2 rows

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

Object Explorer: Connect to DESKTOP-BLAC28R (SQL Server 15.0.2000.1) | Databases | LibraryManagementSystem

```

FROM Member M
  2019 Loan L
    ON M.MemberID = L.MemberID
  2019 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
  2019 Library L
    ON B.LibraryID = L.LibraryID
  2019 Staff S
    ON L.LibraryID = S.LibraryID
WHERE
  L.Name = 'Sultan Qaboos Library'
  AND S.Position = 'Library Manager';

```

Results: 1 row

Title	Library_Name	Manager_Name	Shelf_Location
1	Children's Stories	Sultan Qaboos Library	Khald Al Syabi C3

Query executed successfully. DESKTOP-BLAC28R (15.0.2000.1) | DESKTOP-BLAC28R\fatih | LibraryManagementSystem | 00:00:00 | 1 row

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```

-- Query 1: Find Library Manager
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';

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

```

Results: 1 row(s)

StaffID	Full_Name	Position
3	Wahid N Syah	Library Manager

Query executed successfully. DESKTOP-BLAC28R (15.0.2000.1) | DESKTOP-BLAC28R\fatih | LibraryManagementSystem | 00:00:00 | 1 row(s)

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```

-- Query 2: Find Book Details
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';

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

```

Results: 4 row(s)

Member_Name	Book_Title	Rating	Comments
Sara Al Maskari	NULL	NULL	NULL
Omar Al Rawahi	Data Structures in Python	5	Excellent book for beginners
Lala Al Lawati	Fictional Worlds	4	Very engaging
Fatiha Al-Hadi	NULL	NULL	NULL

Query executed successfully. DESKTOP-BLAC28R (15.0.2000.1) | DESKTOP-BLAC28R\fatih | LibraryManagementSystem | 00:00:00 | 4 row(s)