Verification Queries:

Only return books info

SELECT Item.ItemID, Title, AvailabilityStatus PublicationDate, AuthorID, Type, Genre, ISBN FROM Item
JOIN Book
ON Item.ItemID = Book.ItemID;

Only return magazines info

SELECT Item.ItemID, Title, AvailabilityStatus PublicationDate, AuthorID, Type, Genre, IssueNumber
FROM Item
JOIN Magazine
ON Item.ItemID = Magazine.ItemID;

Only return digital media info

SELECT Item.ItemID, Title, AvailabilityStatus PublicationDate, AuthorID, Type, Genre, MediaType
FROM Item
JOIN DigitalMedia
ON Item.ItemID = DigitalMedia.ItemID;

Return the name of who reserved what item title

SELECT r.ReservationID, c.FirstName, c.LastName, i.Title FROM Reserves r JOIN Client c ON r.ClientID = c.ClientID JOIN Item i ON r.ItemID = i.ItemID;

Author creates items

SELECT a.FirstName, a.LastName, i.Title, i.ItemID FROM Creates c
JOIN Author a ON c.AuthorID = a.AuthorID
JOIN Item i ON c.ItemID = i.ItemID;

Return the late fees and the names of the clients who owe them

SELECT C.FirstName, C.LastName, SUM(L.LateFee) AS Charges

FROM Loans L
JOIN Client C ON L.ClientID=C.ClientID
WHERE L.LateFee IS NOT NULL
GROUP BY C.ClientID

Return the accounts of people who are suspended

SELECT \*
FROM Client
WHERE accountstatus = 'Suspended';

Return the client who has loaned the most items and the amount of items they have loaned

SELECT C.FirstName, C.LastName, COUNT(L.ItemID) AS Items FROM Loans L
JOIN Client C ON C.ClientID = L.ClientID
GROUP BY C.FirstName, C.LastName
ORDER BY Items DESC
LIMIT 1:

Attempt to delete ItemID 1 - This should return an error! DELETE FROM Item WHERE ItemID = 1;

Attempt to delete ItemID 1 - By cleaning it up in every potential child record first - This should work.

DELETE FROM Reserves Where ItemID = 1;
DELETE FROM Loans Where ItemID = 1;
DELETE FROM Creates Where ItemID = 1;
DELETE FROM Book Where ItemID = 1;
DELETE FROM Magazine Where ItemID = 1;
DELETE FROM DigitalMedia Where ItemID = 1;
DELETE FROM Item Where ItemID = 1;

<b>3</b>	58 21:59:07	DELETE FROM Item WHERE ItemID = 1	Error Code: 1451. Cannot delete or update a parent row: a foreign key constrai	0.016 sec
•	59 21:59:43	DELETE FROM Reserves Where ItemID = 1	0 row(s) affected	0.000 sec
0	60 21:59:43	DELETE FROM Loans Where ItemID = 1	1 row(s) affected	0.000 sec
0	61 21:59:43	DELETE FROM Creates Where ItemID = 1	1 row(s) affected	0.016 sec
0	62 21:59:43	DELETE FROM Book Where ItemID = 1	0 row(s) affected	0.000 sec
0	63 21:59:43	DELETE FROM Magazine Where ItemID = 1	1 row(s) affected	0.000 sec
0	64 21:59:43	DELETE FROM DigitalMedia Where ItemID = 1	0 row(s) affected	0.000 sec
0	65 21:59:43	DELETE FROM Item Where ItemID = 1	1 row(s) affected	0.000 sec

Attempt to insert an Item with a null value in attribute Type - This should return an error! INSERT INTO Item (Title, AvailabilityStatus, PublicationDate, AuthorID, Type, Genre) Values ("New Item", 1, '2024-12-03', 1, NULL, "Fantasy");

Attempt to insert an Item with a null value in attribute Author - This should work as intended INSERT INTO Item (Title, AvailabilityStatus, PublicationDate, AuthorID, Type, Genre) Values ("New Item", 1, '2024-12-03', NULL, 'Physical', "Fantasy");

Attempt to insert a key and then a duplicate key; the duplicate key should cause an error. INSERT INTO Item (ItemID, Title, AvailabilityStatus, PublicationDate, AuthorID, Type, Genre) Values (1001, "New Item", 1, '2024-12-03', NULL, 'Physical', "Fantasy"); (1001, "New Item", 1, '2024-12-03', NULL, 'Physical', "Fantasy");