

Attempted Action	SQL Statement	Error Message	Cause	Resolution
Delete a member who has loans	DELETE FROM Member WHERE MemberID = 1;	The DELETE statement conflicted with the REFERENCE constraint ...	Member has rows in Loan table; FK with ON DELETE CASCADE didn't cascade due to paymentID foreign key to Transactions	Deleted loans first or changed FK to support cascade safely
Delete a member who has reviews	DELETE FROM Member WHERE MemberID = 2;	None (successful)	Review table has ON DELETE CASCADE, so reviews deleted automatically	No action needed
Delete a book on loan	DELETE FROM Book WHERE BookID = 101;	The DELETE statement conflicted with the REFERENCE constraint ...	Book referenced in Loan table with ON DELETE CASCADE + Transactions FKs = multiple cascade path error	Used ON DELETE NO ACTION on Loan.paymentID foreign key
Delete a book with multiple reviews	DELETE FROM Book WHERE BookID = 201;	None (successful)	Reviews deleted due to ON DELETE CASCADE on Review.BookID	No action needed
Insert loan for non-existent member	INSERT INTO Loan (MemberID, BookID, paymentID, LoanDate, DueDate, Status) VALUES (999, 101, 1, GETDATE(), GETDATE()+14, 'On Loan');	The INSERT statement conflicted with the FOREIGN KEY constraint ...	MemberID 999 doesn't exist	Created the member first or fixed the input
Insert loan for non-	Same as above but BookID = 999	Same FK error	BookID doesn't exist	Same fix

existent book				
Update book genre to 'Sci-Fi'	UPDATE Book SET Genre = 'Sci-Fi' WHERE BookID = 101;	The UPDATE statement conflicted with the CHECK constraint ...	Genre not in allowed list	Allowed values are: 'Fiction', 'Non-fiction', 'Reference', 'Children'
Insert payment with 0 amount	INSERT INTO Transactions (paymentID, MemberID, BookID, Amount, Method, PaymentDate) VALUES (10, 1, 101, 0, 'Cash', GETDATE());	CHECK constraint violation	Amount must be > 0	Changed to a valid amount
Insert payment with NULL method	Same as above with Method = NULL	Cannot insert the value NULL into column 'Method'..	Method is not nullable	Provide valid method
Insert review for non-existent book	INSERT INTO Review (MemberID, BookID, Rating, Comment) VALUES (1, 999, 4, 'Great!');	FK constraint error	Book does not exist	Fix BookID or add the book
Insert review from unregistered member	Same but MemberID = 999	FK constraint error	Same	Same fix
Update foreign key in	UPDATE Loan SET MemberID = 999 WHERE BookID = 101;	FK constraint error	MemberID doesn't exist	Use valid foreign key value

Loan to  
non-  
existent  
member