

SQL Error Log for Library System

Attempted Action	SQL Statement	Error Message	Cause	Fix
1. Delete member with loans	DELETE FROM Members WHERE M_ID = 1;	DELETE conflicted with REFERENCE constraint on Loan_Link	Member has active loans	Delete from Loan_Link first, then from Members
2. Delete book on loan	DELETE FROM Book WHERE B_ID = 2;	DELETE conflicted with REFERENCE constraint on Loan_Link	Book is referenced in Loan_Link	Delete from Loan_Link first, then from Book
3. Insert loan for non-existent member	INSERT INTO Loan_Link (...) VALUES (... , M_ID = 99, ...);	INSERT conflicted with FOREIGN KEY constraint on Members	Member ID does not exist	Insert the missing member or use a valid ID
4. Update genre to invalid value	UPDATE Book SET Genre = 'Sci-Fi' WHERE B_ID = 1;	UPDATE conflicted with CHECK constraint on Genre	Genre must be one of predefined values	Use 'Fiction', 'Non-fiction', 'Reference', or 'Children'
5. Insert payment with amount = 0	INSERT INTO Payments (...) VALUES (... , 0, ...);	INSERT conflicted with CHECK constraint on Amount	Amount must be > 0	Use a positive number like 5.00
6. Insert review for missing book	INSERT INTO Review_Link (...) VALUES (B_ID = 99, ...);	INSERT conflicted with FOREIGN KEY constraint on Book	Book ID does not exist	Use valid B_ID or insert the book first
7. Insert review with rating = 6	INSERT INTO Review_Link (...) VALUES (... , Rating = 6);	INSERT conflicted with CHECK constraint on Rating	Rating must be between 1 and 5	Use a rating like 4 or 5