Why Use Transactions?

Transactions ensure **data integrity** and **consistency** by grouping multiple SQL operations into a single unit of work. If any operation within the transaction fails, the entire set of operations is rolled back, preventing partial or inconsistent data from being stored in the database. This is crucial for maintaining referential integrity, especially when inserting dependent records in multiple related tables.

Overview

This SQL script creates two tables: `Orders` and `OrderDetails`, establishes a foreign key relationship, and inserts sample data within a transaction.

Transaction Handling

1. Inserts records into the `orders` table.
2. Inserts records into the `OrderDetails` table.
3. Uses `@@error` to check for errors:
    - o If no errors, the transaction is committed.
    - o If errors occur, the transaction is rolled back.