***Assignment 4:*** *Compose SQL statements to BEGIN a transaction, INSERT a new record into the 'orders' table, COMMIT the transaction, then UPDATE the 'products' table, and ROLLBACK the transaction.*

***Transaction 1: INSERT into 'orders' table***

*-- Begin transaction*

*BEGIN TRANSACTION;*

*-- Insert new record into 'orders' table*

*INSERT INTO orders (order\_id, customer\_id, order\_date, order\_total)*

*VALUES (105, 1, '2024-10-13', 1000);*

*-- Commit transaction*

*COMMIT;*

***Transaction 2: UPDATE 'products' table (with ROLLBACK)***

*-- Begin transaction*

*BEGIN TRANSACTION;*

*-- Update 'products' table*

*UPDATE products*

*SET product\_price = product\_price \* 1.1*

*WHERE product\_id = 1;*

*-- Rollback transaction (undo changes)*

*ROLLBACK;*

***Explanation****:*

***Transaction 1:***

*Begins a transaction using BEGIN TRANSACTION.*

*Inserts a new record into the orders table.*

*Commits the transaction using COMMIT, making changes permanent.*

***Transaction 2:***

*Begins another transaction.*

*Updates the product\_price in the products table.*

*Rolls back the transaction using ROLLBACK, undoing changes.*

***Example Use Case:***

*Suppose we have the following tables:*

***Orders Table:***

***order\_id customer\_id order\_date order\_total***

*101 1 2022-01-01 500*

*102 2 2022-01-15 1200*

***Products Table:***

***product\_id product\_name product\_price***

*1 Product A 100*

*2 Product B 200*

***After Transaction 1:***

***Orders Table:***

***order\_id customer\_id order\_date order\_total***

*101 1 2022-01-01 500*

*102 2 2022-01-15 1200*

*105 1 2024-10-13 1000*

***After Transaction 2 (ROLLBACK):***

***Products Table (no changes):***

***product\_id product\_name product\_price***

*1 Product A 100*

*2 Product B 200*