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.

SOLUTION:

CREATE TABLE orders (

order\_id INT PRIMARY KEY,

customer\_id INT,

order\_date DATE,

total\_amount DECIMAL(10, 2)

);

INSERT INTO orders (order\_id, customer\_id, order\_date, total\_amount) VALUES

(101, 1, '2024-05-01', 100.00),

(102, 3, '2024-05-03', 150.00),

(103, 2, '2024-05-05', 200.00),

(104, 2, '2024-05-10', 180.00),

(105, 4, '2024-05-12', 120.00);

CREATE TABLE products (

product\_id INT PRIMARY KEY,

product\_name VARCHAR(100),

stock\_quantity INT

);

INSERT INTO products (product\_id, product\_name, stock\_quantity) VALUES

(123, 'Product A', 50),

(124, 'Product B', 100),

(125, 'Product C', 75);

START TRANSACTION;

INSERT INTO orders (order\_id, customer\_id, order\_date, total\_amount)

VALUES (106, 1, '2024-05-15', 180.00);

COMMIT;

UPDATE products

SET stock\_quantity = stock\_quantity - 1

WHERE product\_id = 123;

ROLLBACK;

OUTPUT:

