

Online Retail System

1. INSERT OPERATIONS :

- Insert a new Customer (FullName, PhoneNumber, Email, ShippingAddress, RegistrationDate) ✓
- Insert 3 new Suppliers ✓
- Insert 2 Categories ✓
- Insert a Product but only (Name, UnitPrice) ✓
- Create table ArchivedStock (TranId, ProductId, QuantityChange, TranDate) Insert into ArchivedStock all StockTransactions before 2023

2. TEMPORARY TABLES

- Create #CustomerOrders with (OrderId, CustomerId, TotalAmount)
Insert customers who made orders above 5000. ✓
- Create ##TopRatedProducts with (ProductId, Rating) Insert
products with rating ≥ 4.5 ✓

3. UPDATE OPERATIONS

- Increase all UnitPrice by 10% for products under 100 EGP
- Update Order Status: If TotalAmount $> 5000 \rightarrow$ “Premium” Else \rightarrow “Standard”

4. DELETE OPERATIONS

- Delete a Review by ReviewId
- Delete all Orders with Status = “Cancelled”
- Delete OrderItems for a given OrderId

5. MERGE OPERATION

- Create table #ProductsUpdate (ProductId, Name, UnitPrice, StockQuantity)

MERGE logic:

If product exists → UPDATE price & stock

If new → INSERT

If a product exists in main table but not in update table →

DELETE

Hotel System

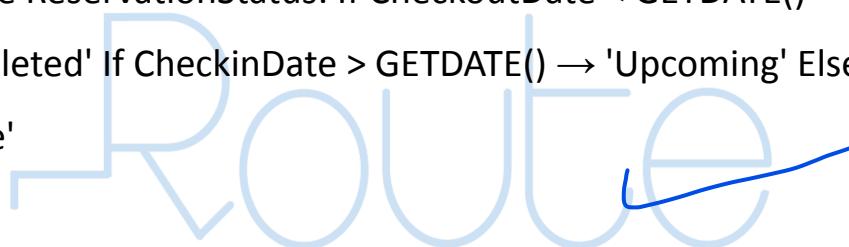
1. INSERT OPERATIONS :

- Insert a Guest (FullName, Nationality, PassportNumber, DateOfBirth)
- Insert multiple Guests in one statement



2. UPDATE OPERATIONS

- Increase DailyRate by 15% for all suites
- Update ReservationStatus: If CheckoutDate < GETDATE() → 'Completed' If CheckinDate > GETDATE() → 'Upcoming' Else → 'Active'



3. DELETE OPERATIONS

- Delete Reservation_Guest for a reservation



4. MERGE OPERATION

- Create table #StaffUpdates (StaffId, FullName, Position, Salary)

MERGE logic:

Match → Update Position + Salary

Not matched in Hotel DB → Insert

Not matched in Update table → Delete

