Views in the RetailEase Project:

My project contains the following **10 SQL views**, each created to provide valuable business insights and operational visibility for an online retail management system. These views are built over core tables such as Users, Orders, Products, Reviews, Payments, Categories, Wishlist, and Promotions.

1. vw_EnhancedCustomerOrderSummary

Purpose:

Displays customer-wise order statistics such as total spending, average order value, latest order status, and a calculated customer segment (Gold/Silver/Bronze/New) based on average monthly spending.

2. vw_CategoryRatingSummary

Purpose:

Aggregates product ratings by category. It includes the average rating and the proportion of 5-star reviews per category, helping understand which categories are performing best in customer satisfaction.

3. vw_OrderSummary

Purpose:

Summarizes each order with the number of products, grand total, payment method, and date. Useful for tracking order-level activity and payment status.

4. vw_ProductInventoryStatus

Purpose:

Shows the current inventory level of each product and classifies it into In Stock, Low Stock, or Out of Stock based on total quantity.

5. vw_UserWishlistProducts

Purpose:

Lists users and the products that are in their wishlist (based on items they previously interacted with). This helps in understanding product interest and planning targeted offers.

6. vw_TopRatedProducts

Purpose:

Displays products with their average rating and total number of reviews. Filters only products with at least 3 reviews to ensure meaningful ratings.

7. vw_CustomerPaymentSummary

Purpose:

Shows how many payments each customer has made, their total amount paid, and the date of their last payment. Helps identify high-value and regular customers.

8. vw_CategoryWiseInventorySummary

Purpose:

Provides inventory summary per category — including total number of products, total stock, and average stock per product. Useful for inventory management and replenishment planning.

9. vw_DailyOrderTrend

Purpose:

Summarizes the number of orders and total revenue generated per day for placed orders. This view is great for trend analysis, sales forecasting, and visual dashboards.

10. vw_OrdersWithoutReviews

Purpose:

Lists orders/products that have been purchased but not yet reviewed by the customer. It helps identify gaps in user feedback and can be used for triggering review reminders.