Mint Classics Inventory Analysis Project

# 1. Project Overview

This project analyzes inventory data for the fictional Mint Classics Company using MySQL Workbench. The goal is to provide data-driven recommendations to support the closure of one of four regional warehouses. The analysis was done through SQL queries exploring stock levels, sales performance, and warehouse utilization.

# 2. SQL Queries Used

SHOW DATABASES;

USE mintclassics;

SHOW Tables;

SELECT COUNT(\*) FROM products;

SELECT warehouseCode, COUNT(\*) FROM products GROUP BY warehouseCode;

SELECT productCode FROM products  
 WHERE productCode NOT IN (SELECT DISTINCT productCode FROM orderdetails);

SELECT productCode, SUM(quantityOrdered) AS total\_sales  
 FROM orderdetails GROUP BY productCode;

SELECT p.productCode, p.productName, p.quantityInStock,   
 SUM(od.quantityOrdered) AS total\_sold  
 FROM products p JOIN orderdetails od ON p.productCode = od.productCode  
 GROUP BY p.productCode;

SELECT p.productCode, p.productName, p.quantityInStock,  
 SUM(od.quantityOrdered) AS totalSold, p.warehouseCode  
 FROM products p LEFT JOIN orderdetails od ON p.productCode = od.productCode  
 GROUP BY p.productCode HAVING (totalSold IS NULL OR totalSold < 20)  
 AND quantityInStock > 100 ORDER BY quantityInStock DESC;

SELECT w.warehouseCode, w.warehouseName, COUNT(p.productCode) AS totalProducts,  
 SUM(p.quantityInStock) AS totalStock FROM warehouses w  
 JOIN products p ON w.warehouseCode = p.warehouseCode  
 GROUP BY w.warehouseCode, w.warehouseName ORDER BY totalStock ASC;

# 3. Key Findings

- Warehouse 'd' (South) has the lowest stock (79,380 units) and lowest product count (23), making it a strong candidate for closure.  
- Product S18\_3233 (1985 Toyota Supra) has 7,733 units in stock but has never been sold, highlighting a significant overstock.  
- East warehouse has the highest concentration of top-selling products but also holds underperforming stock like the Toyota Supra.  
- South and West regions contain products with moderate to low sales activity, supporting redistribution or clearance strategy.

# 4. Business Recommendations

- Close Warehouse 'd' (South) and redistribute its 23 products to other warehouses.  
- Identify and consider discontinuation or clearance of overstocked and underperforming items, such as S18\_3233.  
- Monitor East warehouse inventory for other non-performing stock despite high overall sales volume.  
- Introduce bundling or premium strategies for vintage inventory housed in the West warehouse.

# 5. Conclusion

This analysis, through MySQL Workbench, enabled the identification of potential cost-saving opportunities in Mint Classics’ inventory structure.  
With these insights, the company can make strategic decisions that reduce storage costs, optimize product availability, and maintain customer satisfaction.