**Exercise 3: Inventory Management System**

import java.util.\*;

class Product {

int productId;

String productName;

int quantity;

double price;

public Product(int productId, String productName, int quantity, double price) {

this.productId = productId;

this.productName = productName;

this.quantity = quantity;

this.price = price;

}

public String toString() {

return productId + " | " + productName + " | Qty: " + quantity + " | Price: ₹" + price;

}

}

public class InventoryManagementSystem {

private static HashMap<Integer, Product> inventory = new HashMap<>();

public static void addProduct(Product product) {

if (!inventory.containsKey(product.productId)) {

inventory.put(product.productId, product);

System.out.println("Product added: " + product.productName);

} else {

System.out.println("Product ID already exists.");

}

}

public static void updateProduct(int productId, int newQty, double newPrice) {

Product p = inventory.get(productId);

if (p != null) {

p.quantity = newQty;

p.price = newPrice;

System.out.println("Product updated: " + p.productName);

} else {

System.out.println("Product not found.");

}

}

public static void deleteProduct(int productId) {

if (inventory.containsKey(productId)) {

Product removed = inventory.remove(productId);

System.out.println("Deleted product: " + removed.productName);

} else {

System.out.println("Product not found.");

}

}

public static void displayInventory() {

System.out.println("\n--- Current Inventory ---");

for (Product p : inventory.values()) {

System.out.println(p);

}

}

public static void main(String[] args) {

addProduct(new Product(101, "Laptop", 10, 55000));

addProduct(new Product(102, "Keyboard", 50, 800));

addProduct(new Product(103, "Mouse", 100, 400));

displayInventory();

updateProduct(101, 8, 54000);

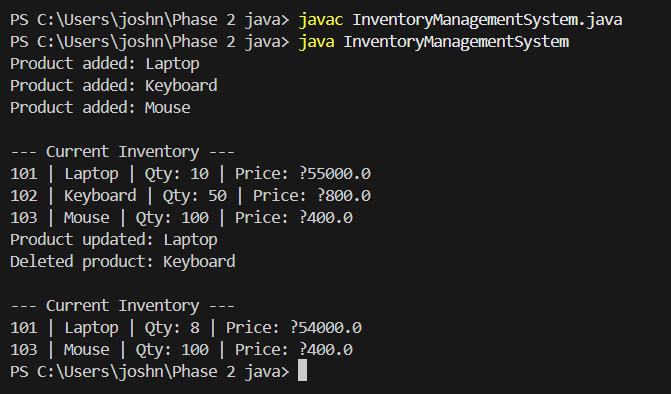
deleteProduct(102);

displayInventory();

}

}

**Output:**

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