public class Product {

private int productId;

private String productName;

private int quantity;

private double price;

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

this.productId = productId;

this.productName = productName;

this.quantity = quantity;

this.price = price;

}

// Getters and Setters

public int getProductId() { return productId; }

public String getProductName() { return productName; }

public int getQuantity() { return quantity; }

public double getPrice() { return price; }

public void setQuantity(int quantity) { this.quantity = quantity; }

public void setPrice(double price) { this.price = price; }

@Override

public String toString() {

return "ID: " + productId + ", Name: " + productName +

", Qty: " + quantity + ", Price: " + price;

}

}

import java.util.HashMap;

public class Inventory {

private HashMap<Integer, Product> products;

public Inventory() {

products = new HashMap<>();

}

public void addProduct(Product product) {

if (products.containsKey(product.getProductId())) {

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

} else {

products.put(product.getProductId(), product);

}

}

public void updateProduct(int productId, int newQuantity, double newPrice) {

Product product = products.get(productId);

if (product != null) {

product.setQuantity(newQuantity);

product.setPrice(newPrice);

} else {

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

}

}

public void deleteProduct(int productId) {

if (products.remove(productId) == null) {

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

}

}

public void listProducts() {

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

System.out.println(p);

}

}

}

public class Main {

public static void main(String[] args) {

Inventory inventory = new Inventory();

Product p1 = new Product(101, "Keyboard", 50, 999.99);

Product p2 = new Product(102, "Mouse", 100, 499.49);

Product p3 = new Product(103, "Monitor", 25, 5999.00);

inventory.addProduct(p1);

inventory.addProduct(p2);

inventory.addProduct(p3);

inventory.listProducts();

inventory.updateProduct(102, 120, 450.00);

inventory.deleteProduct(101);

System.out.println("\nAfter Updates:");

inventory.listProducts();

}

}