//13-b program:

import java.util.ArrayList;

import java.util.Collections;

import java.util.Comparator;

class Fruit {

private String name;

private double price;

private int quantity;

public Fruit(String name, double price, int quantity) {

this.name = name;

this.price = price;

this.quantity = quantity;

}

public String getName() {

return name;

}

public double getPrice() {

return price;

}

public int getQuantity() {

return quantity;

}

@Override

public String toString() {

return "Fruit{name='" + name + "', price=" + price + ", quantity=" + quantity + '}';

}

}

public class FruitSortingExample {

public static void main(String[] args) {

// Create an ArrayList to store fruit information

ArrayList<Fruit> fruitList = new ArrayList<>();

// Populate the fruit list with 20 fruits (you can customize this part)

fruitList.add(new Fruit("Apple", 2.5, 10));

fruitList.add(new Fruit("Banana", 1.8, 15));

fruitList.add(new Fruit("Orange", 3.2, 8));

// Add more fruits as needed...

// Print unsorted fruit list

System.out.println("Unsorted Fruit List:");

for (Fruit fruit : fruitList) {

System.out.println(fruit);

}

// Sort the fruit list based on price using Comparator

Collections.sort(fruitList, Comparator.comparingDouble(Fruit::getPrice));

// Print sorted fruit list

System.out.println("\nSorted Fruit List (by Price):");

for (Fruit fruit : fruitList) {

System.out.println(fruit);

}

}

}