Java HW2

p.506 Chapter 10.19 CarbonFootprint Interface: Polymorphism

Making a Difference

10.19 (Carbonfootprint Interface: Plymorphism) Using interfaces, as you learned in this cha ter, you can specify similar behaviors for possibly disparate classes. Governments and companies worldwide are becoming increasingly concerned with carbon footprints (annual releases of caron dinide into the atmosphere) from buildings burning various types of fucls for heat, vehicles burning fuclh for power, and the like. Many scientists blame these greenhouse gases for the phenomenon called glohal warming

Create three small classes unrclated by inheritanceclasses Building. Car and Bicycle.

Give each class some unique appropriate artributes and bchaviors that it does not have in common with other classes.

Write an interface Carbonfootprint with a getCarbonfootprint method.

Have cach of your classes implement that interface, so that its getCarbonFootprint method cakulates an appropriate carbon footprint for that class (check out a few websites that explain how to calculate carbon footprints).

Write an application that creates objects of cach of the three classes, places references to those objects in ArrayltstCarbonfootprints,

then iterates through the Array- List.

polymorphically invoking each object's getCarbonfootprint method. For each object, print some identifying information and the objecr's carbon footprint.

統整

1. 創建3個class
2. Building
3. Car
4. Bicycle
5. 給每個class獨特且適當的artributes and bchaviors，不跟其他class重疊
6. Write an interface Carbonfootprint with a getCarbonfootprint method.
7. 使用getCarbonfootprint 計算適當的碳足跡(carbon footprint)
8. creates objects of cach of the three classes, places references to those objects in ArrayltstCarbonfootprints, then iterates through the Array- List
9. polymorphically invoking每個物件getCarbonfootprint method，print some identifying information and the objecr's carbon footprint.

Java HW2問題

1. 測試class main code是自己設計嗎? 有需要特別設計甚麼樣的測資嗎?

A: 是，自己設計就好，有問題可以問助教

1. 輸入的api都在int的範圍嗎 還是會超過呢?

A: 要問助教 建議可用long long int

1. 腳踏車 碳足跡是0嗎? 需要考慮製造和維修的碳足跡嗎?

A:是0沒錯，只需考慮移動時候的，不用考慮製造跟維修的