|  |  |
| --- | --- |
| CO2Footprint | |
| **Attributes** (colon indicates type) | - myGasUsed : double  - myElectricityBill : double  - myElectricityPrice : double  - myPeople : int  - myPaper : boolean  - myPlastic : boolean  - myGlass : boolean  - myCans : boolean  - myBulbsReplaced : int  - myCO2GasTons : double  - myCO2Gas : double  - myCO2Electricity : double  - myCO2Waste : double  - myReductionWaste : double  - myReductionBulbs : double  - myCO2Footprint : double |
| **Methods**  (not including getters and setters) | + calcTonsCO2()  + convertTonsToPounds()  + calcElectricityCO2()  + calcGrossWeightEmission()  + calcWasteReduction()  + calcBulbReduction()  + calcCO2Footprint |

**Pseudocode CO2Footprint Class**

calcTonsCO2

myCO2GasTons = 8.78E-3 \* myGallonsUsed

convertTonsToPounds

myCO2Gas = myPoundsCO2 = 2204.62 \* myTonsCO2

calcElectricityCO2

myCO2Electricity = ( myElectricityBill / myElectricityPrice) \* 1.37 \* 12

calcGrossWeightEmission

myCO2Waste = 1018 \* myPeople

calcWasteReduction

if (myPaper, myPlastic, myGlass, myCans)

myReductionWaste += ((184.0, 25.6, 46.6, 165.8) \* myPeople)

calcBulbReduction

myReductionBulbs = myBulbsReplaced \* 1.37 \* 73

calcCO2Footprint

myCO2Footprint = (myCO2Gas + myCO2Electricity + myCO2Waste) - (myReductionWaste + myReductionBulbs)