Skill Assignment 5

This is an individual skill assignment. You may receive help from other class mates, but you may NOT copy their work. Copied work will be considered plagiarism and dealt with according to the syllabus and university policy.

Objective: For this skill assignment, you will demonstrate that you can properly implement a utility class based upon industry-standard UML documentation. Your class must conform to all Java and instructor-provided conventions, standards, and expectations.

Description: Interpreting UML diagrams is a crucial skill to develop in object-oriented programming. Implementing Java class(es) based upon class diagrams is necessary to function in the contemporary application development business world. You will implement the utility class depicted in the class diagram from skill assignment 4. Make sure you implement any corrections indicated from prior feedback into a revised class diagram and implement the utility class properly following all expectations.

Assignment:

- Correct (if necessary) any errors indicated in the skill assignment 4 feedback
  - ***Make sure to submit this corrected class diagram with the Java code***
    - If no corrections were indicated, re-submit the prior class diagram
- Create a utility Java class that implements all functionality depicted in a corrected UML class diagram associated with skill assignment 4:
  - The constant member values are as follows:
    - SALESTAXRATE 0.085
    - SCOOPCOST 1.00
    - CHOCOLATEMARKUP 1.00
    - VANILLAMARKUP 0.50
    - STRAWBERRYMARKUP 0.75
    - CONECOST 0.33
    - SUGARUPCHARGE 0.33
  - The body of the 3 methods will be implemented to support the following descriptions:
    - calcSubTotal
      - returns a decimal data value calculated based upon the values of the argument IceCream passed when this method is invoked
      - Use a proper logical control structure to add the appropriate chocolate/vanilla/strawberry markup based upon the argument's .getFlavor() method value
      - Use a proper logical control structure to add the appropriate conecost/sugarupcharge based upon the argument's .getConeType() method value
      - Use proper logical control structure to add the appropriate scoopcost based upon the argument's .getNumOfScoops() method value
    - calcSalesTax
      - Returns a decimal value calculated based upon the SALESTAXRATE constant and the value of the subtotal argument passed in when this method is invoked.

- calcGrandTotal
  - Returns a decimal value calculated based upon the values of the subTotal, salesTax, and discount arguments passed when this method is invoked

- Upload your .JAVA code and .PNG class file(s) to the appropriate Blackboard assignment