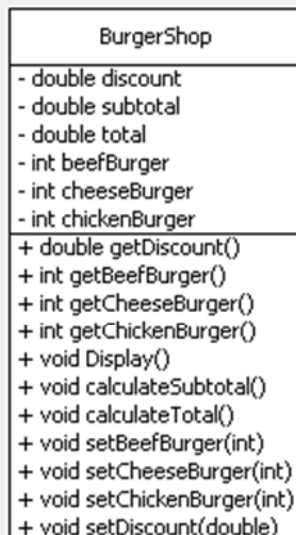


King Saud University
College of Computer and Information Systems, Department of Computer Science
CSC 111: Java Programming-I, Semester I - 2014
Lab #11

[Exercise 1]

A Burger Shop sells a chicken burger for SR 10.5, Beef Burger for SR 6.0 and Cheese Buger for SR 2.5. Write a Java program to compute a customer's bill. Declare a class **BurgerShop** and use appropriate data types for declaring the following attributes *chickenBurger*, *beefBurger*, *cheeseBurger*, *discount*, *subTotal* and *total*. Discount is a number between 0-100 and it represents a percentage. *chickenBurger*, *beefBurger*, *cheeseburger* represent number of items ordered. *subTotal* and *total* represents the amount of the bill before and after discount respectively. See UML for class BurgerShop



Class **BurgerShop** should have the following operations:

1. **Constructor** to initialize the quantities, discount, subtotal and total to 0.
2. **setters()** Methods for the first four attributes.
3. **getters()** Methods for the first four attributes.
4. **calculateSubTotal()** to calculate the subtotal of the bill . It can be done with the following formula: $subtotal = chickenBurger * 10.5 + beefBurger * 6.0 + cheeseBurger * 2.5$. Result would be stored in *subtotal* .

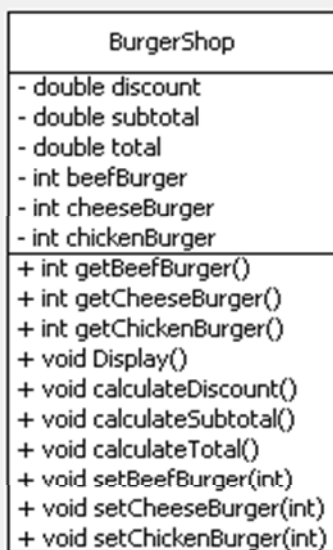
5. *calculateTotal()* to calculate the total cost of the bill, including the discount. Result should be stored in *total*.
6. *display()* to display an itemized bill as follows: (assume discount is 20%)

Item	Quantity	Price
Chicken Burger	8	SR84.0
Beef Burger	4	SR24.0
Cheese Burger	4	SR10.0
Sub total		SR 118.0
Discount (%20.0)		SR 23.6
Total		SR 94.4

Create a class TestBurgerShop, create an object of the BurgerShop. Use setters to assign some appropriate values to first 4 attributes. Calculate subtotal, total bill and display it.

[Exercise 2]

Modify following in BurgerShop class. All the remaining functionality is same as in Exercicio1. See UML



1. **setters()** Methods for the first three attributes.
2. **getters()** Methods for the first three attributes.
3. Add a new method **calculateDiscount()** which calculates the discount according to following table and stores the result in **discount**

Condition	discount
subtotal greater than 100 SR but less than or equal to 150SR	15%
subtotal greater than 150 SR but less than or equal to 200SR	18%
subtotal greater than 200 SR	20%

Create a class TestBurgerShop, create an object of the BurgerShop. Use setters to assign some appropriate values to first 3 attributes. Calculate subtotal, discount, total bill and display it.