

## Tutorial 10

A Café sells coffee for SR 5.50 a cup, Tea for SR 3.50 and Donuts for SR 2.25. Write a Java program to compute a customer's bill. Declare a class **Cafe** and use appropriate data types for declaring the following attributes *coffee*, *tea*, *donut*, *discount*, *subTotal* and *total*. Discount is a number between 0-100 and it represents a percentage, coffee, tea and donut represent amount of items ordered.

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

- 1) **Constructor** to initialize the quantities and discount to 0.
- 2) **setters()** Methods for the four attributes.
- 3) **calculateSubTotal()** to calculate the subtotal of the bill.
- 4) **double calculateTotal()** to calculate the total cost of the bill, including the discount and return this total cost.
- 5) **display()** to display an itemized bill as follows: (assume discount is 10)

Item	Quantity	Price
Coffee	3	SR 16.50
Tea	2	SR 7.00
Donuts	2	SR 4.50
Sub total		SR 28.00
Discount	(%10)	SR 2.80
Total		SR 25.20

*Do the following:*

- (1) Declare the class **Cafe** in a separate file called **Cafe.java**.
- (2) Write the main program to test class **Cafe** using Class **TestCafe.java**. You should read, calculate and display bills for several customers using a menu driven program (*Hint*: use while loop for the menu). Your program should display a menu with 2 options:
  - 1) Read, calculate and display bill for customer
  - 2) Quit
- (3) When the user enters 2 for Quit print the total sales for all the operations.