King Saud University
College of Computer & Information Sciences
Computer Science Department
CSC111 Lab

Encapsulation and information hiding,
Methods passing, getters & setters

Exercise 1:

Create a class called **Employee** that includes three pieces of information as instance variables

1. First name (type String)
2. Last name (type String)
3. Monthly salary (double).

Your class should have the following methods:

Provide a **set** and a **get** method for each instance variable. If the monthly salary is not positive, set it to 0.0.

Write a test application named **EmployeeTest** that demonstrates class Employee's capabilities. Create two Emp1oyee objects and display each object's yearly salary. Then give each Employee a 10% raise and display each Employee's yearly salary again.

(10% raise in Salary) Salary = Salary + (Salary*0.10)

Exercise 2:

Create a class called **Invoice** that a hardware store might use to represent an invoice for an item sold at the store. An Invoice should include four pieces of information as instance variables:

1. Part number (type String)
2. Part description (type String)
3. Quantity of the item being purchased (type int)
4. Price per item (double).

Your class should have the following:

Provide a **set** and a **get** method for each instance variable.

Provide a method named **getInvoiceAmount** that calculates the invoice amount (i.e., multiplies the quantity by the price per item), then returns the amount as a double value. If the quantity is not positive, it should be set to 0.

If the price per item is not positive, it should be set to 0.0.

Write a test application named **InvoiceTest** that demonstrates class Invoice's capabilities. Your program **should keep asking** the user to calculate an invoice by *printing a menu* that has two choices: calculate a new Invoice, and exit.