

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

<u>Lab9</u>	Encapsulation and information hiding, methods passing, getters & setters
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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 Employee objects and display each object's yearly salary. Then give each Employee a 10% raise and display each Employee's yearly salary again.

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.