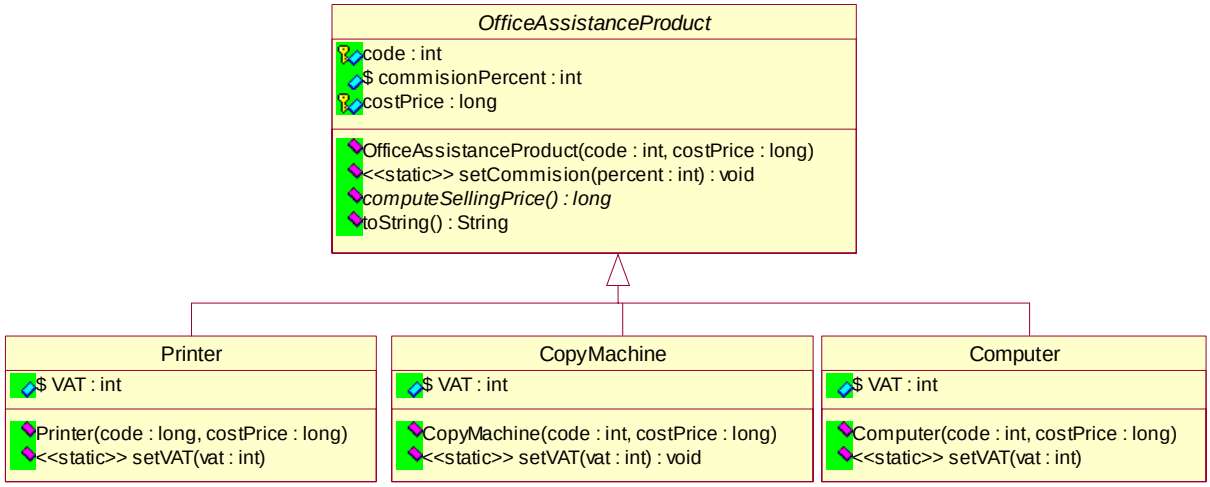
Abstract classes. Object class.

A shop that sells office assistance products has the following kinds of products:

printers,
copy machines and computers. Each product has a numerical code and a cost price, to which it adds a 10% commission collected by shop for all products from store. In addition, the store collects a VAT differentiated by the type of the product. We are assuming that the VAT list is memorized in the file "vat.txt" with the following content:

printer 15%
computer 10%
copy machine 20%

Use the following UML class diagram associated to application:



As you may observe, the class OfficeAssistanceProduct is abstract, having the abstract method computeSellingPrice().

Requirements:

A. Implement the classes from the above diagram

B. In order to test the classes, implement the class TestShop with a method main that carries out the following tasks:

   a. Create an array OfficeAssistanceProduct[] of maximum 5 products.

   b. Compute the selling price for each product from array.

   c. Print the obtained information.

C. Change the class TestShop to use an ArrayList rather a simple array.