

## **Practical/Homework**

### **Due Date: 14.02, before class**

#### **Problem 1.**

Use Factory Method pattern to create 3 different classes Circle, Square and Triangle of type Shape having a method Draw with some implementation of your choice. Have a ShapeFactory class and a Client class and allow the Client to ask the factory to create some concrete shape and to call its method Draw. You can decide what should be the client input and how the factory class should determine which shape to create.

#### **Problem 2.**

Use Factory Method pattern to create 2 different classes PersonalAccount and BusinessAccount of type BankAccount having a method CreateAccount with some implementation of your choice. Have a BankAccountFactory class and a Client class and allow the Client to ask the factory to create an account. The type of the account should be determined based on the client's input. You can decide what should be the client input and how the factory class should determine what type of an account to create.

#### **Problem 3.**

Use the diagram below and function logic of your choice to apply the Abstract Factory pattern.

