812341A Object Oriented Programming spring 2018,

Weekly Assignment 3

The workmust be returned to Moodle by 22 April 2018 at 23.55

One monthly magazine offers two types of orders: on a regular order, the magazine is ordered for a certain period of time (in a few months) and the subscriber pays for the monthly price of the subscription price.

The standing order is valid for the time being, subscribers are billed once a year and receive a percentage discount on the normal order price.

For example, if the monthly price was 10 euros and the discount percentage was 20, the normal order of the year would cost 120 euros and the standing order would pay 96 € per year. Use Java to implement class structure needed.

Subscription is a basic class of all orders that is inherited by the regular order class **RegularSubscription** and the **StandingSubscription** modeling model for permanent subscription.

Common information for all orders is ***journal name***, ***subscriber_name***, ***delivery address***, all type of String and a double-type ***monthly price***.

The ***subscription rate*** (int) is known in normal orders and the ***subscription discount*** (int) is known in standing orders. Implement class constructors as well as member setup and access methods.

In addition, write method **printInvoice (),** which prints the order type, journal name, subscriber's name, delivery address, number of invoiced months (up to 12 in the order period), and order price.

The method must be implemented so that you can use the method you typed in the main method to print billing information for each ordering object

static void printSubscriptionInvoice (Subscription subs)

Note that the type of the parameter is a reference to the **Subscription** class. above-mentioned method is not included in the **Subscription** class or its descendants and is given as a parameter for either subscription category (either **RegularSubscription** or **StandingSubscription**). This demonstrates dynamic binding by using a super class reference to print data of different types. Finally, write the main program that tests the class. The main program must carry out at least the following operations:
1. Enter the required information from the keyboard to create at least one object of both classes RegularSubscription and StandingSubscription.
2. Print billing data for created objects using the printSubscriptionInvoice method.
Type class definitions into separate files and the main program in your own source code (Vt3main.java).