

- 1) Please download **Banks.java** from Blackboard under Lab 7 folder. Read the code carefully and understand how it works. It shows a relationship between a customer and two different banks.

addCustomer and *newCustomer* adds customers to the relative banks.

getLimit as the name suggests returns the credit limit of customer.

raiseLimit and *changeLimit* increases the credit limit of customer by the amount they entered, if possible.

- 2) After some time, the difference of bank interfaces raises some questions. What if a new bank with a new interface comes forth? What happens if banks decide to change limit increase according to customers' other bank limits?

At the end, they agreed upon to creation of a Central Bank, which will uniform the interfaces of banks.

- 3) Create your Façade class: **CentralBank**. It should have a **Bank_A** and **Bank_B** attribute.
- 4) Make your Façade class singleton.
- 5) Implement the method: *bankAction*. This method will be the simplified interface for customers. Depending on a parameter, the customer specifies which operations he/she wants to perform. *bankAction* does the operations through banks.

bankAction should take 5 parameters: Customer, Initial Limit for adding a customer, New Limit for increasing the limit, bank name as a String ("A" or "B") and an ArrayList of Booleans with 3 elements.

The ArrayList will represent the operations that the customers wants done. If all 3 elements are True, all operations will be done.

- 6) Rewrite or modify the main, so that your program uses newly created Façade class of yours.