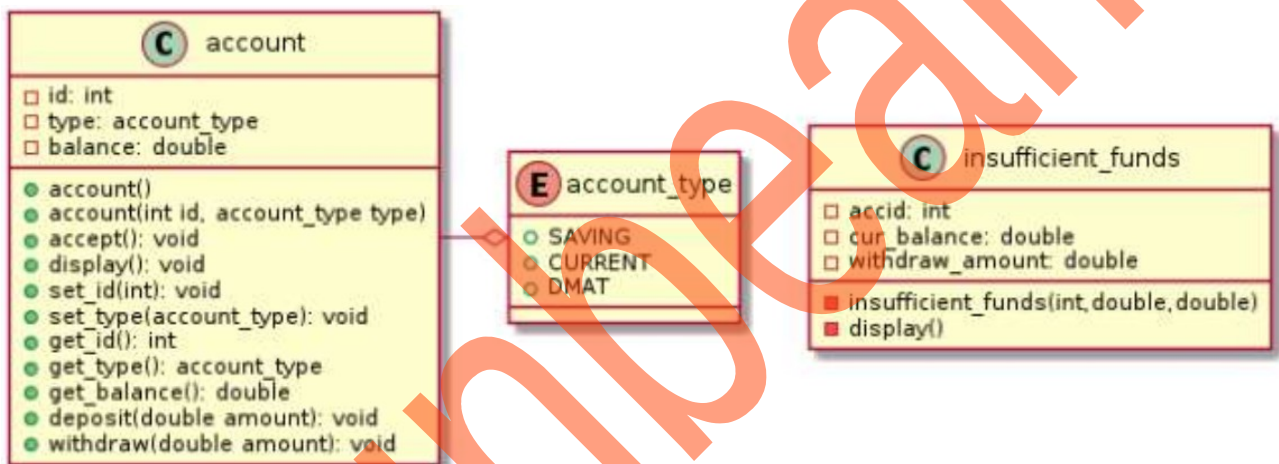


Assignment 7

Q1. Write a user defined function factorial() that calculates factorial of given number and it throws exception if number entered by user is negative.

Q2. Create a user defined class "Fraction" with data members numerator and denominator. Provide constructors, getter/setters and methods like lowestForm() and decimalValue(). The setDenominator() method should throw exception if value is zero. Overload operators +, -, *, /, =, ==, !=, <, >.

Q1. Write a class to store Account information of Bank customer by using following class diagram. Use enum to store information of account type. Create an array of 5 Accounts in main() and accept their details from user. Write Menu driven program to deposit/withdraw amount from the account. After each transaction display updated account balance. Provide appropriate getters/setters with necessary validations. Throw exceptions for invalid values. Also implement an exception class InsufficientFunds. In withdraw() member function, if sufficient balance is not available in account, throw this exception.



Q4. Create a class Array. User will provide the size and type of array he wants to create. Write a template class for same. It should provide functionalities like `addElement(int element)`, `displayElement(int index)`, `deleteElement(int index)`. Also provides mutators and inspectors.