RIPHAH INTERNATIONAL UNIVERSITY, LAHORE CAMPUS.

SCHOOL OF COMPUTING & INNOVATION (RSCI)

OBJECT ORIENTED PROGRAMMING LAB 05

Date: 26-04-2022
Semester: SPRING 2022
Submission: In Lab
CLASS: BSCS – 2B

Objectives:

- More exercises on object oriented paradigm of programming.
- Focus on constructors and types.
- Accessors and Mutators.
- Implementation of classes using UML Class Diagram.

Task 1:

Implement a class **Account** having data members and functions given in following UML Class Diagram.

Account
- accno   : string   - acctitle   : string   - amount   : double   - acctype   : char
+ Account( )   + Account (string, string, double, char)   + Amount (const Amount &)   + deposit (double) : void   + withdraw (double) : void   + changeType( ) : void   + checkBalance ( ) : double   + displayAccountInfo ( ) : void   + getAccNo( ) : string   + getAccTitle( ) : string   + getAmount( ) : double   + getAccType( ) : char   + setAccNo(string) : void   + setAccTitle(string) : void   + setAmount(double) : void   + setAccType(char) : void   + ~ Account( )

Instructor: Haroon Shahzad

+ Account( )	Default Constructor
+ Account (string, string, double, char)	Parameterized Constructor
+ Amount (const Amount &)	Copy Constructor
+ deposit (double) : void	Takes amount and deposit in account.
+ withdraw (double) : void	Takes amount and withdraw from account if account has sufficient amount.
+ changeType( ) : void	Changes the type of account.
+ checkBalance ( ) : double	Displays current balance of account.
+ displayAccountInfo ( ) : void	Display all account information
+ getAccNo( ) : string	
+ getAccTitle( ) : string	
+ getAmount( ) : double	Getters (Accessors)
+ getAccType( ) : char	
+ setAccNo(string) : void	
+ setAccTitle(string) : void	
+ setAmount(double) : void	Setters (Mutators)
+ setAccType(char) : void	
+ ~ Account( )	Destructor

Write a main function to do the following:

- Create an Account class object **'a1'** with values of your choice.
- Display current account balance.
- Deposit 1000 PKR in account a1.
- Display current account balance again to verify amount is added successfully.
- Withdraw 700 PKR from account a1.
- Display current account balance again to verify amount is subtracted successfully.
- User wants to change its account type. Change account type.
- Display all account information.
- Create another account **'a2'** with the similar data in a1.
- Deposit 5000 PKR in a2 account.
- Now display both accounts complete information.

GOOD LUCK ☺