LAB 9 : ACCOUNT CLASS

Account
accountName : string accountNumber : string accountType: int accountBalance : float
getBalance() : float withdraw(float): void deposit(float) : void printDetail() : void

Write a complete C++ program that is able to do the following tasks:

1. Write a class definition based on the class diagram above. Declare the data members as private, while the member functions as public.

2. Define the constructor for class account by one of the following method:

   i. Overload constructors - Define the first constructor without parameter and the second constructor with parameter. Both constructor will initialize the data members with suitable values.

ii. Constructor with default argumen - initialize the data members with suitable values.

3. Write implementation function for the following member function:

i. `getBalance( )` – return the the account balance.

ii. `withdraw(float )` – allow user to withdraw some money. Check whether the balance in the account is sufficient to be withdrawn.

iii. `deposit(float)` – allow user to deposit some money and update the balance in the account.

iv. `printDetail()` – print all the information in the account.

4. Write `main()` program that will declare 2 instances of object account. Declare the instances based on the parameters provided in the constructor.

5. Implement all member functions to show the transactions of the accounts using: `getBalance( )`, `withdraw( )`, `deposit( )` and `printDetail()` which are accessed through the objects.

6. Declare an array of account with size 10. Read information about the account from a data file. Add necessary function to initialize the array elements.

7. Add one member function for account class, named `transfer(account a)` that will allow transfer to be done from one account to another. Use appropriate passing value approach, either by value or reference. Ask the user to insert an account Number and the program should search for the account number. If the account does not exist, give proper message and if the account exists, implement the transfer function. Give appropriate message to show the transaction process has successfully being processed.