

# CS 202 : IT Workshop I

## Assignment 4

Total Marks =10

### Account

- accountNumber: int
- accountType: String
- serviceBranchIFSC: String
- minimumBalance: float
- availableBalance: float
- customerID: int
- customerName: String
- totalAccountCreated: int

<<constructor>>Account()  
+ setDetails ()  
+ getDetails (accoutNo: int): String  
+ updateDetails(accoutNo: int): void  
+ getBalance (accoutNo: int): float  
+ deposit (accoutNo: int, amount: float)  
+ withdraw (accoutNo: int, amount: float)  
+ totalAccount(): int  
+ compare (account1: Account, account2:Account)

Consider a Banking Application System and implement the following in Java. The variable/method names indicate their usual meanings. The methods (deposit, withdraw, etc.) will be invoked for one object at a time and this will be identified by the account number which is passed as a parameter or can also be taken from the user.

- a) Create an array of objects for the Account class.
- b) Design a menu-driven interface for the user. A user will choose an option from 1. Update Details, 2. Get Details, 3. Deposit, 4. Withdraw, 5. Exit etc. Based on the option entered by the user, an appropriate operation should be performed by calling the appropriate method of the class.
- c) Write a method to display the total number of accounts created for a point in time. Put this option in the user menu.
- d) You can assume additional instance variables, additional methods, static fields, etc. if needed / to make the application more realistic.

e) Method compare will compare and display the details of the account whose available balance is more. [Hint: compare only the available balance of two account objects.]

Note:

1. Underlined fields indicate static members of the class.
2. updateDetails(accoutNo) shall give a list of options to the user to update (e.g. minimum balance, customer id, etc.) for the given accoutNo. [Hint: use nested switch-case/if-else construct].