***LAB 1***

**1.**  The Actors in the given use case diagram are

* Cur\_Icenturian
* Account Holder
* Sav\_Icenturian
* Email System

**2**. The email system used in this application is to send regular updates about the user transactions and his balance on weekly or monthly basis.

**3**. If the data sources are the part of application then there is no use of the actor sav\_icenturian>The data will automatically saved in data sources when used.

**4**. Account Holder can invoke

* Transfer funds
* Request Address change
* View Account details
* View Account Summary
* Login
* Activate Destination Account
* Create Destination Account

**5**. The stereotype generalization arrow with “extends” depicts the extend relationship between the use cases.The below are the use cases with “<<extend>>”(Extension Points for fund transfer usecase)

* Activate Destination Account
* Create destination Account

**6**. Yes,the system allow user to pay insurance premium via fund transfer .This application user creates destination account and then activates destination account to pay money.

***LAB 2***

**1.** The activity diagram describes about the “Login Use Case”.

**2**. Swimlanes in the activity diagram are user and sytem.

**3**. Invalidate login details save username and start incrementing count from 1 till count is 3 for the given username and after count is then the activity goes to end state.

***LAB 3.1***

***A***

1. DBAccount Statement,Connection are some objects in sequence diagram.
2. ResultSet is the external data source from data being retrieved.
3. executeQuery is the operation used in class diagram.
4. No error condition is modeled in the given sequence diagram,can be modeled by adding error condition while executing “getcount” operation.The error condition can be “no account found in database for the given customer details”.

***B***

1. Yes.
2. getSecurityClearance(userId),determineAvailableReports() are the operations used in ReportingSystem class.
3. AvailableReports are returned for getAvailableReports().
4. ReportingSystem is responsible for calling determineAvailableReports()”.

***LAB 4.1***

1. Start state is to start the activity and end state is to end the activity,from open state to closed state is an activity.
2. Overdrawn and Frozen are the sub-states in the activity diagram.
3. The action for the activity diagram are as follows

* Return funds in Exit action
* Inform state holders is Entry action
* Closure Activity is Internal Activity

1. The below condition shows that it goes into suspended state”.

* When the balance is less than 1000
* When the account is Fraud.

***LAB 5.1***

1. Classes in the given application are:

* MainOptionForm
* TransferFundsForm
* TransferFundsController
* CurAcctBankSystem
* TransferDetails
* Customer
* Savings Account
* Current Account
* Account

1. Customer id :-String

FirstName:string

LastName:String.

1. CalculateTransferFee()

ExecuteTransfer()

getCustomer()

1. Generalization from savings and current account class to Account class.Dependency is TransferDeatils class

Association are as follows

* MainOptionForm
* TransferFundsForm
* TransferFundsController
* CurAcctBankSystem
* Customer
* Account

1. Yes,customer can hold multiple accounts since account to customer is many to one realtionship and joint account is not possible as customer to account has one to many relationship.
2. ‘Customer has account’ can be created using aggregation realationship.

***LAB 6.1***

1. Stereotype <<extend>> is used in use case diagram as external mechanism.
2. No stereotypes are used in the class diagram.
3. No adornments are used in the class diagram.
4. No “notes” being depicted in any diagrams.