JAVA AWT BASED- Online MOOC's year wise student database management system - SQL CONNECTIVITY USING JDBC

A

Report

Submitted in partial fulfilment of the

Requirements for the award of the Degree of

BACHELOR OF ENGINEERING

IN

INFORMATION TECHNOLOGY

By

I.V. PRANAV KUMAR<1602-18-737-116>

Department of Information Technology

Vasavi College of Engineering (Autonomous)

Ibrahimbagh, Hyderabad-31

2020

BONAFIDE CERTIFICATE

This is to certify that this project report titled “AUTOMATED FINGERPRINT BASED ATM(LINKING AADHARCARD)” is the bona fide mini project work of Mr. I.V. PRANAV KUMAR bearing hall ticket number 1602-18-737-116 under the guidance of B. Leelavathy during 4th semester B.E for the academic year 2019-2020.

External Examiner

Internal Examiner

B.LEELAVATHY
Assistant Professor
Department Of Information Technology

Automated Fingerprint based Atm.

AIM:

To create a Java GUI for ATM which is based on fingerprint by linking Aadhar card. We have created different tables related to banks, ATM, and Aadhar card. We a database of the tables where we perform update, delete and insert.

These values are to be updated in the database using JDBC connectivity.

Abstract:

The growth in electronic transactions has resulted in a greater demand for fast and accurate user identification and authentication. Access codes for buildings, banks accounts and computer systems often use personal identification numbers (PIN's) for identification and security clearances. Conventional method of identification based on possession of ID cards or exclusive knowledge like a social security number or a password are not all together reliable. An embedded fingerprint biometric authentication scheme for automated teller machine (ATM) banking systems is proposed in this paper. In this scheme, a fingerprint biometric technique is fused with the ATM for person authentication to ameliorate the security level.

Introduction:

REQUIREMENT ANALYSIS

List of tables:

- BANK
- AADHAR
- VERIFICATION DATA
- ATM
- TRANSACTIONS

List of attributes with their domain types:

BANK:

Bank Name:bname –Varchar2(20)

Name:username-varchar2(20)

Amount:amount-number(20)

Account Pin: accpin-number()

Account Id:accid- number()

AADHAR:

Aadhar number:anum-number()

Name: name-varchar2(20)

Gender:gender-varchar(10)

Address:address-varchar2(20)

Father name:fname-varchar2(20)

Verification Data:

FingerPrints: fingerprints-varchar()

Name:name-varchar2(20)

Fingertype:fingertype-varchar2(20)

ATM:

Bank Name:aname-varchar2(20)

Atm Card Number-acnum-number()

TRANSACTIONS:

Date: tdate-number()

Transaction Amount: transamount-number()

Time: time-number()

Account id: acid-number().

SOFTWARE USED:

Java Eclipse, Oracle 11g Database, Java SE version 7, SQL*Plus.

Eclipse: It is an integrated development environment (IDE) used in computer programming. It contains a base workspace and an extensible plug in system for customizing the environment. The Eclipse software development kit (SDK), which include java development tools is meant for java developers.

SQL *plus: SQL *plus is a command line tool proprietary to oracle. You can send SQL Queries to the server using the tool. It can also help you format the result of query. SQL is the query language that is used to communicate with the oracle server to access and modify data.

Java AWT:

Java AWT (Abstract Window Toolkit) is an API to develop GUI or window-based

applications in java.

Java AWT components are platform-dependent i.e. components are displayed according

to the view of operating system. AWT is heavyweight i.e. its components are using the

resources of OS.

The java.awt package provides classes for AWT API such as TextField, Label, TextArea,

RadioButton, CheckBox, Choice, List etc.

Java Swing:

Java Swing is a part of Java Foundation Classes (JFC) which was designed for enabling large-scale enterprise development of Java applications. Java Swing is a set of APIs that provides graphical user interface (GUI) for Java programs. Java Swing is also known as Java GUI widget toolkit.

Java Swing or Swing was developed based on earlier APIs called Abstract Windows Toolkit (AWT). Swing provides richer and more sophisticated GUI components than AWT. The GUI components are ranging from a simple label to complex tree and table. Besides emulating look and feel of various platforms, Swing also provides *the pluggable look and feel* to allow look and feel of Java programs independent from the underlying platform.

SQL:

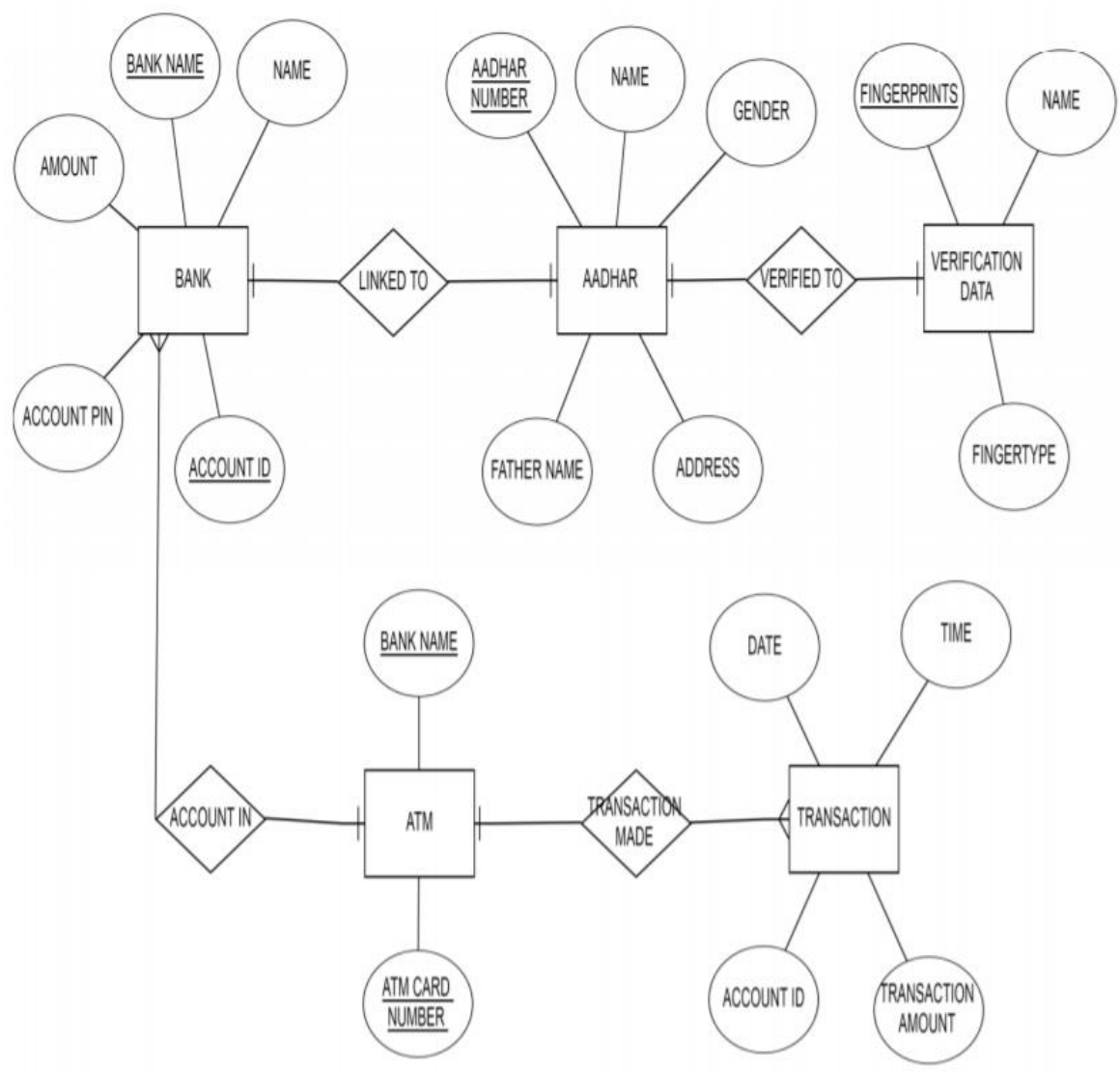
Structure Query Language(SQL) is a database query language used for storing and

managing data in Relational DBMS. SQL was the first commercial language introduced

for E.F Codd's Relational model of database. Today almost all RDBMS (MySql , Oracle, Infomix , Sybase, MS Access) use SQL as the standard database query language. SQL is

used to perform all types of data operations in RDBMS.

ER DIAGRAM:



CREATION OF TABLE:

DDL AND DML COMMANDS :

SQL> CREATE TABLE BANK (BNAME NUMBER, USERNAME VARCHAR2(20),ACCID

NUMBER,ACCPIN NUMBER,AMOUNT NUMBER);

Table created.

```
SQL> DESC BANK
 Name                      Null?   Type
 ----------------------------------- -------------- ----------------------------------------------------
 BNAME                              NUMBER
 USERNAME                           VARCHAR2(20)
 ACCID                              NUMBER
 ACCPIN                             NUMBER
 AMOUNT                             NUMBER
```

SQL> ALTER TABLE BANK ADD(PRIMARY KEY(BNAME));

Table altered.

```
SQL> DESC BANK
 Name                      Null?   Type
 ----------------------------------- -------------- ----------------------------------------------------
 BNAME                     NOT NULL NUMBER
 USERNAME                           VARCHAR2(20)
 ACCID                              NUMBER
 ACCPIN                             NUMBER
 AMOUNT                             NUMBER
```

SQL> ALTER TABLE BANK MODIFY(BNAME VARCHAR2(20));

Table altered.

```
SQL> DESC BANK
 Name                      Null?   Type
 ----------------------------------- -------------- ----------------------------------------------------
 BNAME                     NOT NULL VARCHAR2(20)
```

```
USERNAME                                  VARCHAR2(20)
ACCID                                     NUMBER
ACCPIN                                    NUMBER
AMOUNT                                    NUMBER
SQL> DESC BANK
 Name                                     Null?    Type
 ----------------------------------------- -------- ----------------------------------------------------
 BNAME                                    NOT NULL VARCHAR2(20)
 USERNAME                                          VARCHAR2(20)
 ACCID                                    NUMBER
 ACCPIN                                   NUMBER
 AMOUNT                                   NUMBER

SQL> INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT);
Enter value for bname: SBI
Enter value for username: PRANAV
Enter value for accid: 1602116
Enter value for accpin: 116
Enter value for amount: 10000
old 1: INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT)
new 1: INSERT INTO BANK VALUES('SBI','PRANAV',1602116,116,10000)

SQL> INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT);
Enter value for bname: HDFC
Enter value for username: ABHI
Enter value for accid: 1602061
Enter value for accpin: 061
Enter value for amount: 20000
old 1: INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT)
new 1: INSERT INTO BANK VALUES('HDFC','ABHI',1602061,061,20000)

1 row created.
```

```
SQL> /
Enter value for bname: ICIC
Enter value for username: BADRINATH
Enter value for accid: 1602066
Enter value for accpin: 066
Enter value for amount: 30000
old 1: INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT)
new 1: INSERT INTO BANK VALUES('ICIC','BADRINATH',1602066,066,30000)

1row created.
SQL> /
Enter value for bname: PNB
Enter value for username: YASHO
Enter value for accid: 1602120
Enter value for accpin: 120
Enter value for amount: 40000
old 1: INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT)
new 1: INSERT INTO BANK VALUES('PNB','YASHO',1602120,120,40000)

1 row created.

SQL> INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT);
Enter value for bname: SBI
Enter value for username: VARUN
Enter value for accid: 1602115
Enter value for accpin: 115
Enter value for amount: 12000
old 1: INSERT INTO BANK
VALUES('&BNAME','&USERNAME',&ACCID,&ACCPIN,&AMOUNT)
new 1: INSERT INTO BANK VALUES('SBI','VARUN',1602115,115,12000)

1 row created.

SQL> SELECT * FROM BANK;
```

BNAME	USERNAME	ACCID	ACCPIN	AMOUNT
SBI	PRANAV	1602116	116	10000
HDFC	ABHI	1602061	61	20000
ICIC	BADRINATH	1602066	66	30000
PNB	YASHO	1602120	120	40000
SBI	VARUN	1602115	115	12000

1 row created.

```
SQL> CREATE TABLE AADHARCARD(ANUM NUMBER PRIMARY KEY,NAME
VARCHAR2(20),GENDER VARCHAR(10),ADDRESS VARCHAR2(50),FNAME
VARCHAR2(20));
```

Table created.

```
SQL> INSERT INTO AADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME');
Enter value for anum: 1861
Enter value for name: ABHI
Enter value for gender: M
Enter value for address: SUNCITY
Enter value for fname: SRINU
old 1: INSERT INTO AADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME')
new 1: INSERT INTO AADHARCARD VALUES(1861,'ABHI','M','SUNCITY','SRINU')
```

1row created.

```
SQL> /
Enter value for anum: 1866
Enter value for name: BADRINATH
Enter value for gender: M
Enter value for address: GAJWEL
Enter value for fname: VENU
```

old 1: INSERT INTO AADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME')
new 1: INSERT INTO AADHARCARD
VALUES(1866,'BADRINATH','M','GAJWEL','VENU')

1row created.

SQL> /
Enter value for anum: 18115
Enter value for name: VARUN
Enter value for gender: M
Enter value for address: JANGON
Enter value for fname: RAMU
old 1: INSERT INTO AADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME')
new 1: INSERT INTO AADHARCARD
VALUES(18115,'VARUN','M','JANGON','RAMU')

1row created.

SQL> /
Enter value for anum: 18116
Enter value for name: PRANAV
Enter value for gender: M
Enter value for address: AMEERPET
Enter value for fname: SRINIVAS
old 1: INSERT INTOAADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME')
new 1: INSERT INTO AADHARCARD
VALUES(18116,'PRANAV','M','AMEERPET','SRINIVAS')

1row created.

SQL> /
Enter value for anum: 118120
Enter value for name: YASHO
Enter value for gender: M

```
Enter value for address: NAMPALLY
Enter value for fname: RAMU
old 1: INSERT INTO AADHARCARD
VALUES(&ANUM,'&NAME','&GENDER','&ADDRESS','&FNAME')
new 1: INSERT INTO AADHARCARD
VALUES(118120,'YASHO','M','NAMPALLY','RAMU')

1 row created.

SQL> SELECT * FROM AADHARCARD;

     ANUM NAME               GENDER
--------- ------------------------------ ----------
ADDRESS                                  FNAME
---------------------------------------- ------------------------------
     1861 ABHI               M
SUNCITY                                  SRINU

     1866 BADRINATH          M
GAJWEL                                   VENU

    18115 VARUN              M
JANGON                                   RAMU


     ANUM NAME               GENDER
--------- ------------------------------ ----------
ADDRESS                                  FNAME
---------------------------------------- ------------------------------
    18116 PRANAV             M
AMEERPET                                 SRINIVAS

   118120 YASHO              M
NAMPALLY                                 RAMU


SQL> DESC VERIFICATIONDATA
```

```
Name                                      Null?    Type
----------------------------------------- -------- ----------------------------------------------------
FINGERPRINT                               NOT NULL VARCHAR2(20)
NAME                                               VARCHAR2(20)
FINGERTYPE                                         VARCHAR2(20)

SQL> INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE');
Enter value for fingerprint: =
Enter value for name: PRANAV
Enter value for fingertype: INDEX
old 1: INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE')
new 1: INSERT INTO VERIFICATIONDATA VALUES('=','PRANAV','INDEX')

1row created.

SQL> /
Enter value for fingerprint: )
Enter value for name: ABHI
Enter value for fingertype: INDEX
old 1: INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE')
new 1: INSERT INTO VERIFICATIONDATA VALUES(')','ABHI','INDEX')

1row created.

SQL> /
Enter value for fingerprint: @
Enter value for name: BADRINATH
Enter value for fingertype: THUMB
old 1: INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE')
new 1: INSERT INTO VERIFICATIONDATA VALUES('@','BADRINATH','THUMB')

1 row created.
```

```
SQL> /
Enter value for fingerprint: ?
Enter value for name: YASHO
Enter value for fingertype: RING FINGER
old 1: INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE')
new 1: INSERT INTO VERIFICATIONDATA VALUES('?','YASHO','RING FINGER')

1 row created.

SQL> /
Enter value for fingerprint: >
Enter value for name: YASHO
Enter value for fingertype: THUMB
old 1: INSERT INTO VERIFICATIONDATA
VALUES('&FINGERPRINT','&NAME','&FINGERTYPE')
new 1: INSERT INTO VERIFICATIONDATA VALUES('>','YASHO','THUMB')

1 row created.

SQL> SELECT * FROM VERIFICATIONDATA;

FINGERPRINT         NAME                FINGERTYPE
------------------- ----------------------------------- -----------------------------------
=                   PRANAV              INDEX
)                   ABHI                INDEX
@                   BADRINATH           THUMB
?                   YASHO               RING FINGER
>                   YASHO               THUMB


SQL> ALTER TABLE ATM DROP(AMOUNT);

Table altered.

SQL> INSERT INTO ATM VALUES('&ANAME',&ACNUM);
Enter value for aname: SBI
```

```
Entervalue for acnum: 116
old 1: INSERT INTO ATM VALUES('&ANAME',&ACNUM)
new 1: INSERT INTO ATM VALUES('SBI',116)

1row created.

SQL> /
Enter value for aname: HDFC
Enter value for acnum: 61
old 1: INSERT INTO ATM VALUES('&ANAME',&ACNUM)
new 1: INSERT INTO ATM VALUES('HDFC',61)

1row created.

SQL> /
Enter value for aname: ICIC
Enter value for acnum: 66
old 1: INSERT INTO ATM VALUES('&ANAME',&ACNUM)
new 1: INSERT INTO ATM VALUES('ICIC',66)

1row created.

SQL> /
Enter value for aname: PNB
Entervalue for acnum: 120
old 1: INSERT INTO ATM VALUES('&ANAME',&ACNUM)
new 1: INSERT INTO ATM VALUES('PNB',120)

1row created.

SQL> /
Enter value for aname: SBH
Enter value for acnum: 115
old 1: INSERT INTO ATM VALUES('&ANAME',&ACNUM)
new 1: INSERT INTO ATM VALUES('SBH',115)

1 row created.
```

```
SQL> SELECT * FROM ATM;

ANAME                ACNUM
-------------------- --------------------
SBI                   116
HDFC                   61
ICIC                  66
PNB                    120
SBH                    115
SQL> UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=12;
Enter value for accid: 1602116
old 1: UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=12
new 1: UPDATE TRANSACTION SET ACCID=1602116 WHERE TIME=12

1 rowupdated.

SQL> /
Enter value for accid:
old  1: UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=12
new 1: UPDATE TRANSACTION SET ACCID= WHERE TIME=12
UPDATE TRANSACTION SET ACCID= WHERE TIME=12
                   *
ERROR at line 1:
ORA-00936: missing expression


SQL> UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=13;
Enter value for accid: 1602115
old 1: UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=13
new 1: UPDATE TRANSACTION SET ACCID=1602115 WHERE TIME=13

1 row updated.

SQL> UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=14;
Enter value for accid: 1602061
old 1: UPDATE TRANSACTION SET ACCID=&ACCID WHERE TIME=14
```

```
new 1: UPDATE TRANSACTION SET ACCID=1602061 WHERE TIME=14

1 row updated.

SQL> SELECT * FROM TRANSACTION;

    TDATE      TIME TRANSAMONUT      ACCID
--------- ---------- ---------- ----------
 23012000         12      10000    1602116
 24012000         13      10000    1602115
 25012000         14     200000    1602061
```

Java-SQL Connectivity using JDBC:

Java Database Connectivity (JDBC) is an application programming interface (API) for

the programming language Java, which defines how a client may access a database. It is a

Java-based data access technology used for Java database connectivity. It is part of

the Java Standard Edition platform, from Oracle Corporation. It provides methods to

query and update data in a database and is oriented towards relational databases.

The connection to the database can be performed using Java programming (JDBC API)

as:

```
private void connToDb()

{
```

```
        try
        {
                Class.forName("oracle.jdbc.driver.OracleDriver");

        connection=DriverManger.getConnection("jdbc:oracle:thin:@localhost:1522:xe",
"pranav","pranav23");
                statement=connection.createStatement();
        }
        catch(SQLException connectException)
        {
                System.out.println(connectException.getMessage());
                System.out.println(connectException.getSQLState());
                System.out.println(connectException.getErrorCode());
                System.exit(1);
        }
        catch(Exception e)
        {
                System.err.println("Unable to find and load driver");
                System.exit(1);
        }
}
```

Thus, the connection from Java to Oracle database is performed and therefore, can be

used for updating tables in the database directly.

Program For Main GUI:

```
package dbms;
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

public class home extends JFrame{
private JPanel panel1;
private JButton btnMycity;
private JButton btnLandmarks;
private JButton btnServices;
private JButton btnHotels;
private JButton btnMetrostations;
private JButton btnTouristplaces;
private JButton btnHas_Hotels;
private JButton btnHas_metrostations;
private JButton btnHas_touristplaces;
public home()
{
panel1=new JPanel(new GridLayout(3,3,15,15));
btnMetrostations=new JButton("Bank");
```

```
btnHas_Hotels=new JButton("Linkedto");
btnHas_metrostations=new JButton("AadharCard");
btnHas_touristplaces=new JButton("VerifiedTo");
btnHotels=new JButton("VerificationData");
btnLandmarks=new JButton("AccountIn");
btnMycity=new JButton("Atm");
btnServices=new JButton("TransactionMade");
btnTouristplaces=new JButton("Transaction");
panel1.setBackground(Color.BLACK);
panel1.add(btnMycity);
panel1.add(btnServices);
panel1.add(btnLandmarks);
panel1.add(btnHotels);
panel1.add(btnMetrostations);
panel1.add(btnTouristplaces);
panel1.add(btnHas_Hotels);
panel1.add(btnHas_metrostations);
panel1.add(btnHas_touristplaces);
this.setVisible(true);
this.setSize(600,400);
this.setDefaultCloseOperation(3);
this.add(panel1,BorderLayout.CENTER);
btnHas_Hotels.addActionListener(new ActionListener() {

@Override
```

```
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new LinkedToView();
dispose();
}
});
btnHas_metrostations.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new AadharCardView();
dispose();
}
});
btnHas_touristplaces.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new VerifiedToView();
dispose();
}
});
btnHotels.addActionListener(new ActionListener() {
```

```
@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new VerificationDataView();
dispose();
}
});
btnLandmarks.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new AccountInView();
dispose();
}
});
btnMetrostations.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new BankView();
dispose();
}
```

```
});
btnMycity.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new AtmView();
dispose();
}
});
btnServices.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new TransactionMadeView();
dispose();
}
});
btnTouristplaces.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
new TransactionView();
```

```
dispose();
}
});
}
public static void main(String args[])
{
new home();
}
}
```

Program For Insert BANK:

```
package dbms;
import javax.swing.*;
import java.sql.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;

public class BankInsert extends JFrame{
        private JPanel pn;
        private JLabel bn;
        private JLabel nn;
        private JLabel amt;
        private JLabel ap;
        private JLabel aid;
        private JTextField tpn;
```

```
private JTextField tbn;

private JTextField tnn;

private JTextField tamt;

private JTextField tap;

private JTextField taid;

private JButton btn;

private JMenu Transaction;

private JMenu TransactionMade;

private JMenu ATM;

private JMenu AccountIn;

private JMenu Bank;

private JMenu LinkedTo;

private JMenu Aadhar;

private JMenu VerifiedTo;

private JMenu VerifiedData;

private JMenuBar menubar;

private JMenuItem insert1;

private JMenuItem delete1;

private JMenuItem view1;

private JMenuItem insert2;

private JMenuItem delete2;

private JMenuItem view2;

private JMenuItem insert3;

private JMenuItem delete3;

private JMenuItem view3;

private JMenuItem insert4;

private JMenuItem delete4;

private JMenuItem view4;
```

```
private JMenuItem insert5;
private JMenuItem delete5;
private JMenuItem view5;
private JMenuItem insert6;
private JMenuItem delete6;
private JMenuItem view6;
private JMenuItem insert7;
private JMenuItem delete7;
private JMenuItem view7;
private JMenuItem insert8;
private JMenuItem delete8;
private JMenuItem view8;
private JMenuItem insert9;
private JMenuItem view9;
private JMenuItem delete9;

public BankInsert() {
        pn = new JPanel(new FlowLayout());
        bn = new JLabel("Bank Name");
        tbn = new JTextField(20);
        nn = new JLabel("Name");
        tnn = new JTextField(20);
        amt = new JLabel("Amount");
        tamt = new JTextField(20);
        ap = new JLabel("Account Pin");
        tap = new JTextField(20);
        aid = new JLabel("Account Id");
        taid = new JTextField(20);
```

```
btn = new JButton("Insert");
menubar=new JMenuBar();
Transaction=new JMenu("Transaction");
insert1=new JMenuItem("Insert");
view1=new JMenuItem("View");
delete1=new JMenuItem("Delete");
Transaction.add(insert1);
Transaction.add(view1);
Transaction.add(delete1);
TransactionMade=new JMenu("TransactionMade");
insert2=new JMenuItem("Insert");
view2=new JMenuItem("View");
delete2=new JMenuItem("Delete");
TransactionMade.add(insert2);
TransactionMade.add(view2);
TransactionMade.add(delete2);
ATM=new JMenu("ATM");
insert3=new JMenuItem("Insert");
view3=new JMenuItem("View");
delete3=new JMenuItem("Delete");
ATM.add(insert3);
ATM.add(view3);
ATM.add(delete3);
AccountIn=new JMenu("AccountIn");
insert4=new JMenuItem("Insert");
view4=new JMenuItem("View");
delete4=new JMenuItem("Delete");
AccountIn.add(insert4);
```

```
AccountIn.add(view4);
AccountIn.add(delete4);
Bank=new JMenu("Bank");
insert5=new JMenuItem("Insert");
view5=new JMenuItem("View");
delete5=new JMenuItem("Delete");
Bank.add(insert5);
Bank.add(view5);
Bank.add(delete5);
LinkedTo=new JMenu("LinkedTo");
insert6=new JMenuItem("Insert");
view6=new JMenuItem("View");
delete6=new JMenuItem("Delete");
LinkedTo.add(insert6);
LinkedTo.add(view6);
LinkedTo.add(delete6);
Aadhar=new JMenu("Aadhar");
insert7=new JMenuItem("Insert");
view7=new JMenuItem("View");
delete7=new JMenuItem("Delete");
Aadhar.add(insert7);
Aadhar.add(view7);
Aadhar.add(delete7);
VerifiedTo=new JMenu("VerifiedTo");
insert8=new JMenuItem("Insert");
view8=new JMenuItem("View");
delete8=new JMenuItem("Delete");
VerifiedTo.add(insert8);
```

```
VerifiedTo.add(view8);
VerifiedTo.add(delete8);
VerifiedData=new JMenu("VerifiedData");
insert9=new JMenuItem("Insert");
view9=new JMenuItem("View");
delete9=new JMenuItem("Delete");
VerifiedData.add(insert9);
VerifiedData.add(view9);
VerifiedData.add(delete9);
this.setSize(600,600);
this.setVisible(true);
this.setDefaultCloseOperation(3);
this.add(pn);
//pn.add(lbl);
pn.add(bn);
pn.add(tbn);
pn.add(nn);
pn.add(tnn);
pn.add(amt);
pn.add(tamt);
pn.add(ap);
pn.add(tap);
pn.add(aid);
pn.add(taid);
pn.add(btn);
this.setJMenuBar(menubar);
menubar.add(Transaction);
menubar.add(TransactionMade);
```

```
menubar.add(ATM);
menubar.add(AccountIn);
menubar.add(Bank);
menubar.add(LinkedTo);
menubar.add(Aadhar);
menubar.add(VerifiedTo);
menubar.add(VerifiedData);
insert1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionInsert();
		dispose();
		}
});
view1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionView();
		dispose();
	}
});
delete1.addActionListener(new ActionListener() {

	@Override
```

```
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new TransactionDelete();
			dispose();
		}
});
insert2.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new TransactionMadeInsert();
			dispose();
		}
});
view2.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new TransactionMadeView();
			dispose();
		}
});
delete2.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent e) {
```

```
                // TODO Auto-generated method stub
                new TransactionMadeDelete();
                dispose();
        }
});
insert3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmInsert();

                dispose();
        }
});
view3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmView();
                dispose();
        }
});
delete3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
```

```
                // TODO Auto-generated method stub
                new AtmDelete();
                dispose();
        }
});
insert4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AccountInInsert();
                dispose();
        }
});
view4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AccountInView();
                dispose();
        }
});
delete4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
```

```
                new AccountInDelete();
                dispose();
        }
});
insert5.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new BankInsert();
                dispose();
        }
});
view5.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new BankView();
                dispose();
        }
});
delete5.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new BankDelete();
```

```
                dispose();
        }
});
insert6.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new LinkedToInsert();
                dispose();
        }
});
view6.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new LinkedToView();
                dispose();
        }
});
delete6.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new LinkedToDelete();
                dispose();
```

```
        }
});
insert7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardInsert();
                dispose();
        }
});
view7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardView();
                dispose();
        }
});
delete7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardDelete();
                dispose();
        }
```

```
});
insert8.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new VerifiedToInsert();
		dispose();
	}
});
view8.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new VerifiedToView();
		dispose();
	}
});
delete8.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new VerifiedToDelete();
		dispose();
	}
});
```

```
insert9.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent arg0) {
		// TODO Auto-generated method stub
		new VerificationDataInsert();
		dispose();

	}
});
view9.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent arg0) {
		// TODO Auto-generated method stub
		new VerificationDataView();
		dispose();
	}
});
delete9.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent arg0) {
		// TODO Auto-generated method stub
		new VerificationDataDelete();
		dispose();
	}
```

```
		});
		btn.addActionListener(new ActionListener() {


			@Override
			public void actionPerformed(ActionEvent e) {
				// TODO Auto-generated method stub
				if(taid.getText().compareTo("")==0 || tnn.getText().compareTo("")==0
|| tamt.getText().compareTo("")==0 || tap.getText().compareTo("")==0 ||
taid.getText().compareTo("")==0)
				{
					JOptionPane.showMessageDialog(null, "Enter All fieldS");
				}
				else
				{
					try{

						Class.forName("oracle.jdbc.driver.OracleDriver");


						Connection con=DriverManager.getConnection(
	"jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");


						Statement stmt=con.createStatement();
						String bname=tbn.getText();
						String username=tnn.getText();
						String accid=taid.getText();
						if(checkaccountid(accid))
						{
							JOptionPane.showMessageDialog(null,"Enter
Vaild AccountId");
```

```
                                        throw new Exception();
                                    }
                                    String accpin=tap.getText();
                                    String amount=tamt.getText();
                                    int x=stmt.executeUpdate("Insert into bank
values('"+bname+"','"+username+"',"+accid+","+accpin+","+amount+")");
                                    con.commit();
                                    System.out.println("Inserted rows:"+x);
                                    tbn.setText("");
                                    tnn.setText("");
                                    taid.setText("");
                                    tap.setText("");
                                    tamt.setText("");



                                    con.close();


                                    }catch(Exception ex){ System.out.println(ex);}
                                }
                            }
                        });
                }
                public boolean checkaccountid(String accountid)
                {
                        try {
                                Integer.parseInt(accountid);
                                return false;
                                }
```

```
                catch(Exception e)
                {
                        return true;
                }
        }
        public static void main(String[] args)
        {
                new BankInsert();
        }

}
```

Program For Update Of Hotels Table:

```
package dbms;
import javax.swing.*;
import java.sql.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.sql.ResultSet;

public class BankView extends JFrame {
        private JPanel pn;
        private JLabel bn;
        private JLabel nn;
        private JLabel amt;
        private JLabel ap;
```

```
private JLabel aid;
private JTextField tpn;
private JTextField tbn;
private JTextField tnn;
private JTextField tamt;
private JTextField tap;
private JTextField taid;
private JLabel lblsac;
private JTextField txtsac;
private JButton btnvw;
private JButton btn;
private JTextArea txtmes;
private JMenu Transaction;
private JMenu TransactionMade;
private JMenu ATM;
private JMenu AccountIn;
private JMenu Bank;
private JMenu LinkedTo;
private JMenu Aadhar;
private JMenu VerifiedTo;
private JMenu VerifiedData;
private JMenuBar menubar;
private JMenuItem insert1;
private JMenuItem delete1;
private JMenuItem view1;
private JMenuItem insert2;
```

```
private JMenuItem delete2;
private JMenuItem view2;
private JMenuItem insert3;
private JMenuItem delete3;
private JMenuItem view3;
private JMenuItem insert4;
private JMenuItem delete4;
private JMenuItem view4;
private JMenuItem insert5;
private JMenuItem delete5;
private JMenuItem view5;
private JMenuItem insert6;
private JMenuItem delete6;
private JMenuItem view6;
private JMenuItem insert7;
private JMenuItem delete7;
private JMenuItem view7;
private JMenuItem insert8;
private JMenuItem delete8;
private JMenuItem view8;
private JMenuItem insert9;
private JMenuItem view9;
private JMenuItem delete9;
public BankView() {
        pn = new JPanel(new FlowLayout());
        txtmes = new JTextArea(10,20);
```

```
lblsac = new JLabel("Enter Account Id:");
txtsac = new JTextField(20);
btnvw = new JButton("View");
bn = new JLabel("Bank Name");
tbn = new JTextField(20);
nn = new JLabel("Name");
tnn = new JTextField(20);
amt = new JLabel("Amount");
tamt = new JTextField(20);
ap = new JLabel("Account Pin");
tap = new JTextField(20);
aid = new JLabel("Account Id");
taid = new JTextField(20);
btn = new JButton("Modify");
menubar=new JMenuBar();
Transaction=new JMenu("Transaction");
insert1=new JMenuItem("Insert");
view1=new JMenuItem("View");
delete1=new JMenuItem("Delete");
Transaction.add(insert1);
Transaction.add(view1);
Transaction.add(delete1);
TransactionMade=new JMenu("TransactionMade");
insert2=new JMenuItem("Insert");
view2=new JMenuItem("View");
delete2=new JMenuItem("Delete");
```

```
TransactionMade.add(insert2);
TransactionMade.add(view2);
TransactionMade.add(delete2);
ATM=new JMenu("ATM");
insert3=new JMenuItem("Insert");
view3=new JMenuItem("View");
delete3=new JMenuItem("Delete");
ATM.add(insert3);
ATM.add(view3);
ATM.add(delete3);
AccountIn=new JMenu("AccountIn");
insert4=new JMenuItem("Insert");
view4=new JMenuItem("View");
delete4=new JMenuItem("Delete");
AccountIn.add(insert4);
AccountIn.add(view4);
AccountIn.add(delete4);
Bank=new JMenu("Bank");
insert5=new JMenuItem("Insert");
view5=new JMenuItem("View");
delete5=new JMenuItem("Delete");
Bank.add(insert5);
Bank.add(view5);
Bank.add(delete5);
LinkedTo=new JMenu("LinkedTo");
insert6=new JMenuItem("Insert");
```

```
view6=new JMenuItem("View");
delete6=new JMenuItem("Delete");
LinkedTo.add(insert6);
LinkedTo.add(view6);
LinkedTo.add(delete6);
Aadhar=new JMenu("Aadhar");
insert7=new JMenuItem("Insert");
view7=new JMenuItem("View");
delete7=new JMenuItem("Delete");
Aadhar.add(insert7);
Aadhar.add(view7);
Aadhar.add(delete7);
VerifiedTo=new JMenu("VerifiedTo");
insert8=new JMenuItem("Insert");
view8=new JMenuItem("View");
delete8=new JMenuItem("Delete");
VerifiedTo.add(insert8);
VerifiedTo.add(view8);
VerifiedTo.add(delete8);
VerifiedData=new JMenu("VerifiedData");
insert9=new JMenuItem("Insert");
view9=new JMenuItem("View");
delete9=new JMenuItem("Delete");
VerifiedData.add(insert9);
VerifiedData.add(view9);
VerifiedData.add(delete9);
```

```
this.setSize(400,400);
this.setTitle("Bank View");
this.setVisible(true);
this.setDefaultCloseOperation(3);
this.add(pn);
pn.add(txtmes);
pn.add(lblsac);
pn.add(txtsac);
pn.add(btnvw);
pn.add(bn);
pn.add(tbn);
pn.add(nn);
pn.add(tnn);
pn.add(amt);
pn.add(tamt);
pn.add(ap);
pn.add(tap);
pn.add(aid);
pn.add(taid);
pn.add(btn);
this.setJMenuBar(menubar);
menubar.add(Transaction);
menubar.add(TransactionMade);
menubar.add(ATM);
menubar.add(AccountIn);
menubar.add(Bank);
```

```
menubar.add(LinkedTo);
menubar.add(Aadhar);
menubar.add(VerifiedTo);
menubar.add(VerifiedData);
insert1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionInsert();
		dispose();
		}
});
view1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionView();
		dispose();
	}
});
delete1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
```

```
                // TODO Auto-generated method stub
                new TransactionDelete();
                dispose();
        }
});
insert2.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionMadeInsert();
                dispose();
        }
});
view2.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionMadeView();
                dispose();
        }
});
delete2.addActionListener(new ActionListener() {

        @Override
```

```
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionMadeDelete();
                dispose();
        }
});
insert3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmInsert();

                dispose();
        }
});
view3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmView();
                dispose();
        }
});
delete3.addActionListener(new ActionListener() {
```

```
        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmDelete();
                dispose();
        }
});
insert4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AccountInInsert();
                dispose();
        }
});
view4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AccountInView();
                dispose();
        }
});
```

```
delete4.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new AccountInDelete();
		dispose();
	}
});
insert5.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new BankInsert();
		dispose();
	}
});
view5.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new BankView();
		dispose();
	}
```

```
});
delete5.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new BankDelete();
		dispose();
	}
});
insert6.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new LinkedToInsert();
		dispose();
	}
});
view6.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new LinkedToView();
		dispose();
```

```
        }
});
delete6.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new LinkedToDelete();
                dispose();
        }
});
insert7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardInsert();
                dispose();
        }
});
view7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardView();
```

```
                dispose();
        }
});
delete7.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AadharCardDelete();
                dispose();
        }
});
insert8.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new VerifiedToInsert();
                dispose();
        }
});
view8.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
```

```
                new VerifiedToView();
                dispose();
        }
});
delete8.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new VerifiedToDelete();
                dispose();
        }
});
insert9.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent arg0) {
                // TODO Auto-generated method stub
                new VerificationDataInsert();
                dispose();

        }
});
view9.addActionListener(new ActionListener() {

        @Override
```

```
		public void actionPerformed(ActionEvent arg0) {
			// TODO Auto-generated method stub
			new VerificationDataView();
			dispose();
		}
});
delete9.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent arg0) {
			// TODO Auto-generated method stub
			new VerificationDataDelete();
			dispose();
		}

});
try{

		Class.forName("oracle.jdbc.driver.OracleDriver");

		Connection con=DriverManager.getConnection(
		"jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");

		Statement stmt=con.createStatement();
		ResultSet rs=stmt.executeQuery("select accid from bank ");
		while(rs.next())
```

```
                {
                        txtmes.append(rs.getString(1)+"\n");

                }

                con.close();

                }catch(Exception ex){ System.out.println(ex);}
        btnvw.addActionListener(new ActionListener() {

                @Override
                public void actionPerformed(ActionEvent e) {
                        // TODO Auto-generated method stub
                        if(txtsac.getText().compareTo("")==0)
                                JOptionPane.showMessageDialog(null, "Enter Account
id");
                        else
                        {
                                try{

                                        Class.forName("oracle.jdbc.driver.OracleDriver");

                                        Connection con=DriverManager.getConnection(
        "jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");

                                        Statement stmt=con.createStatement();
```

```
                                        ResultSet rs=stmt.executeQuery("select * from
bank where accid="+txtsac.getText()+"");
                                        while(rs.next())
                                        {
                                                tbn.setText(rs.getString(1));
                                                tnn.setText(rs.getString(2));
                                                taid.setText(rs.getString(3));
                                                tap.setText(rs.getString(4));
                                                tamt.setText(rs.getString(5));

                                        }

                                        con.close();

                                        }catch(Exception ex){ System.out.println(ex);}
                                }
                        }
                });
                btn.addActionListener(new ActionListener() {

                        @Override
                public void actionPerformed(ActionEvent e) {
                                // TODO Auto-generated method stub
                                if(taid.getText().compareTo("")==0 ||
tnn.getText().compareTo("")==0 || tamt.getText().compareTo("")==0 ||
tap.getText().compareTo("")==0 || taid.getText().compareTo("")==0)
                                {
                                        JOptionPane.showMessageDialog(null, "Enter All fieldS");
```

```
                }
                else
                {
                        try{
                                Class.forName("oracle.jdbc.driver.OracleDriver");
                                Connection con=DriverManager.getConnection(
        "jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");
                                Statement stmt=con.createStatement();
                                String bname=tbn.getText();
                                String username=tnn.getText();
                                String accid=taid.getText();
                                String accpin=tap.getText();
                                String amount=tamt.getText();
                                int x=stmt.executeUpdate("update bank set
bname='"+bname+"',username='"+username+"',accid="+accid+",accpin="+accpin+",amount="+
amount+" where accid="+txtsac.getText());
                                con.commit();
                                System.out.println("Updated rows:"+x);
                                tbn.setText("");
                                tnn.setText("");
                                taid.setText("");
                                tap.setText("");
                                tamt.setText("");
                                txtmes.setText("");
                                txtsac.setText("");
                                ResultSet rs=stmt.executeQuery("select accid
from bank ");
```

```
                                        while(rs.next())
                                        {
                                                txtmes.append(rs.getString(1)+"\n");
                                        }
                                        con.close();

                                        }catch(Exception ex){ System.out.println(ex);}
                                }
                        }
                });
        }
        public static void main(String[] args)
        {
                new BankView();

        }
}
```

Program for Delete BANK:

```
package dbms;
import java.sql.*;
import javax.swing.*;
import java.awt.*;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
```

```
public class BankDelete extends JFrame {
        private JPanel pn;
        private JLabel bn;
        private JLabel nn;
        private JLabel amt;
        private JLabel ap;
        private JLabel aid;
        private JTextField tpn;
        private JTextField tbn;
        private JTextField tnn;
        private JTextField tamt;
        private JTextField tap;
        private JTextField taid;
        private JButton btn;
        private JTextArea txtmes;
        private JLabel lblsac;
        private JTextField txtsac;
        private JButton btnvw;
        private JMenu Transaction;
        private JMenu TransactionMade;
        private JMenu ATM;
        private JMenu AccountIn;
        private JMenu Bank;
        private JMenu LinkedTo;
        private JMenu Aadhar;
```

```
private JMenu VerifiedTo;
private JMenu VerifiedData;
private JMenuBar menubar;
private JMenuItem insert1;
private JMenuItem delete1;
private JMenuItem view1;
private JMenuItem insert2;
private JMenuItem delete2;
private JMenuItem view2;
private JMenuItem insert3;
private JMenuItem delete3;
private JMenuItem view3;
private JMenuItem insert4;
private JMenuItem delete4;
private JMenuItem view4;
private JMenuItem insert5;
private JMenuItem delete5;
private JMenuItem view5;
private JMenuItem insert6;
private JMenuItem delete6;
private JMenuItem view6;
private JMenuItem insert7;
private JMenuItem delete7;
private JMenuItem view7;
private JMenuItem insert8;
private JMenuItem delete8;
```

```
private JMenuItem view8;
private JMenuItem insert9;
private JMenuItem view9;
private JMenuItem delete9;
public BankDelete() {
        pn = new JPanel(new FlowLayout());
        txtmes = new JTextArea(10,20);
        lblsac = new JLabel("Enter Account Id:");
        txtsac = new JTextField(20);
        btnvw = new JButton("View");
        bn = new JLabel("Bank Name");
        tbn = new JTextField(20);
        nn = new JLabel("Name");
        tnn = new JTextField(20);
        amt = new JLabel("Amount");
        tamt = new JTextField(20);
        ap = new JLabel("Account Pin");
        tap = new JTextField(20);
        aid = new JLabel("Account Id");
        taid = new JTextField(20);
        btn = new JButton("Delete");
        menubar=new JMenuBar();
        Transaction=new JMenu("Transaction");
        insert1=new JMenuItem("Insert");
        view1=new JMenuItem("View");
        delete1=new JMenuItem("Delete");
```

```
Transaction.add(insert1);
Transaction.add(view1);
Transaction.add(delete1);
TransactionMade=new JMenu("TransactionMade");
insert2=new JMenuItem("Insert");
view2=new JMenuItem("View");
delete2=new JMenuItem("Delete");
TransactionMade.add(insert2);
TransactionMade.add(view2);
TransactionMade.add(delete2);
ATM=new JMenu("ATM");
insert3=new JMenuItem("Insert");
view3=new JMenuItem("View");
delete3=new JMenuItem("Delete");
ATM.add(insert3);
ATM.add(view3);
ATM.add(delete3);
AccountIn=new JMenu("AccountIn");
insert4=new JMenuItem("Insert");
view4=new JMenuItem("View");
delete4=new JMenuItem("Delete");
AccountIn.add(insert4);
AccountIn.add(view4);
AccountIn.add(delete4);
Bank=new JMenu("Bank");
insert5=new JMenuItem("Insert");
```

```
view5=new JMenuItem("View");
delete5=new JMenuItem("Delete");
Bank.add(insert5);
Bank.add(view5);
Bank.add(delete5);
LinkedTo=new JMenu("LinkedTo");
insert6=new JMenuItem("Insert");
view6=new JMenuItem("View");
delete6=new JMenuItem("Delete");
LinkedTo.add(insert6);
LinkedTo.add(view6);
LinkedTo.add(delete6);
Aadhar=new JMenu("Aadhar");
insert7=new JMenuItem("Insert");
view7=new JMenuItem("View");
delete7=new JMenuItem("Delete");
Aadhar.add(insert7);
Aadhar.add(view7);
Aadhar.add(delete7);
VerifiedTo=new JMenu("VerifiedTo");
insert8=new JMenuItem("Insert");
view8=new JMenuItem("View");
delete8=new JMenuItem("Delete");
VerifiedTo.add(insert8);
VerifiedTo.add(view8);
VerifiedTo.add(delete8);
```

```
VerifiedData=new JMenu("VerifiedData");
insert9=new JMenuItem("Insert");
view9=new JMenuItem("View");
delete9=new JMenuItem("Delete");
VerifiedData.add(insert9);
VerifiedData.add(view9);
VerifiedData.add(delete9);
this.setSize(400,400);
this.setTitle("Bank View");
this.setVisible(true);
this.setDefaultCloseOperation(3);
this.add(pn);
pn.add(txtmes);
pn.add(lblsac);
pn.add(txtsac);
pn.add(btnvw);
pn.add(bn);
pn.add(tbn);
pn.add(nn);
pn.add(tnn);
pn.add(amt);
pn.add(tamt);
pn.add(ap);
pn.add(tap);
pn.add(aid);
pn.add(taid);
```

```
pn.add(btn);
this.setJMenuBar(menubar);
menubar.add(Transaction);
menubar.add(TransactionMade);
menubar.add(ATM);
menubar.add(AccountIn);
menubar.add(Bank);
menubar.add(LinkedTo);
menubar.add(Aadhar);
menubar.add(VerifiedTo);
menubar.add(VerifiedData);
insert1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionInsert();
		dispose();
		}
});
view1.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new TransactionView();
```

```
                dispose();
        }
});
delete1.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionDelete();
                dispose();
        }
});
insert2.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionMadeInsert();
                dispose();
        }
});
view2.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
```

```
                new TransactionMadeView();
                dispose();
        }
});
delete2.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new TransactionMadeDelete();
                dispose();
        }
});
insert3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmInsert();

                dispose();
        }
});
view3.addActionListener(new ActionListener() {

        @Override
```

```
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmView();
                dispose();
        }
});
delete3.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AtmDelete();
                dispose();
        }
});
insert4.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new AccountInInsert();
                dispose();
        }
});
view4.addActionListener(new ActionListener() {
```

```
		@Override
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new AccountInView();
			dispose();
		}
});
delete4.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new AccountInDelete();
			dispose();
		}
});
insert5.addActionListener(new ActionListener() {

		@Override
		public void actionPerformed(ActionEvent e) {
			// TODO Auto-generated method stub
			new BankInsert();
			dispose();
		}
});
view5.addActionListener(new ActionListener() {
```

```
        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new BankView();
                dispose();
        }
});
delete5.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new BankDelete();
                dispose();
        }
});
insert6.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new LinkedToInsert();
                dispose();
        }
});
```

```
view6.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new LinkedToView();
		dispose();
	}
});
delete6.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new LinkedToDelete();
		dispose();
	}
});
insert7.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new AadharCardInsert();
		dispose();
	}
```

```
});
view7.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new AadharCardView();
		dispose();
	}
});
delete7.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new AadharCardDelete();
		dispose();
	}
});
insert8.addActionListener(new ActionListener() {

	@Override
	public void actionPerformed(ActionEvent e) {
		// TODO Auto-generated method stub
		new VerifiedToInsert();
		dispose();
```

```
        }
});
view8.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new VerifiedToView();
                dispose();
        }
});
delete8.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent e) {
                // TODO Auto-generated method stub
                new VerifiedToDelete();
                dispose();
        }
});
insert9.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent arg0) {
                // TODO Auto-generated method stub
                new VerificationDataInsert();
```

```
                dispose();

        }
});
view9.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent arg0) {
                // TODO Auto-generated method stub
                new VerificationDataView();
                dispose();
        }
});
delete9.addActionListener(new ActionListener() {

        @Override
        public void actionPerformed(ActionEvent arg0) {
                // TODO Auto-generated method stub
                new VerificationDataDelete();
                dispose();
        }

});
try{

        Class.forName("oracle.jdbc.driver.OracleDriver");
```

```
Connection con=DriverManager.getConnection(
"jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");

Statement stmt=con.createStatement();
ResultSet rs=stmt.executeQuery("select accid from bank ");
while(rs.next())
{
	txtmes.append(rs.getString(1)+"\n");

}

con.close();

}catch(Exception ex){ System.out.println(ex);}
btnvw.addActionListener(new ActionListener() {

@Override
public void actionPerformed(ActionEvent e) {
	// TODO Auto-generated method stub
	if(txtsac.getText().compareTo("")==0)
		JOptionPane.showMessageDialog(null, "Enter Account
id");
	else
	{
		try{
```

```
                                        Class.forName("oracle.jdbc.driver.OracleDriver");

                                        Connection con=DriverManager.getConnection(
        "jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");

                                        Statement stmt=con.createStatement();
                                        ResultSet rs=stmt.executeQuery("select * from
bank where accid="+txtsac.getText()+"");
                                        while(rs.next())
                                        {
                                                tbn.setText(rs.getString(1));
                                                tnn.setText(rs.getString(2));
                                                taid.setText(rs.getString(3));
                                                tap.setText(rs.getString(4));
                                                tamt.setText(rs.getString(5));

                                        }

                                        con.close();

                                        }catch(Exception ex){ System.out.println(ex);}
                                }
                        }
                });
                btn.addActionListener(new ActionListener() {
```

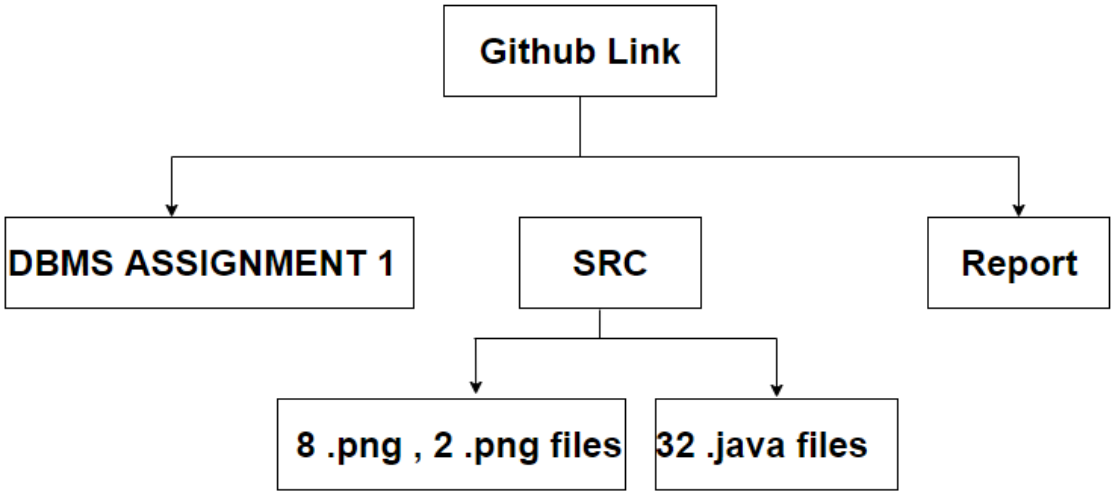
```
@Override
public void actionPerformed(ActionEvent e) {
// TODO Auto-generated method stub
if(taid.getText().compareTo("")==0 ||
tnn.getText().compareTo("")==0 || tamt.getText().compareTo("")==0 ||
tap.getText().compareTo("")==0 || taid.getText().compareTo("")==0)
{
JOptionPane.showMessageDialog(null, "Enter All fieldS");
}
else
{
try{
Class.forName("oracle.jdbc.driver.OracleDriver");
Connection con=DriverManager.getConnection(
"jdbc:oracle:thin:@localhost:1521:xe","pranav","pranav23");
Statement stmt=con.createStatement();
String bname=tbn.getText();
String username=tnn.getText();
String accid=taid.getText();
String accpin=tap.getText();
String amount=tamt.getText();
int x=stmt.executeUpdate("delete from bank
where accid="+txtsac.getText());
con.commit();
```

```
                                        System.out.println("Deleted rows:"+x);
                                        tbn.setText("");
                                        tnn.setText("");
                                        taid.setText("");
                                        tap.setText("");
                                        tamt.setText("");
                                        txtmes.setText("");
                                        txtsac.setText("");
                                        ResultSet rs=stmt.executeQuery("select accid
from bank ");
                                        while(rs.next())
                                        {
                                                txtmes.append(rs.getString(1)+"\n")
                                        }
                                        con.close();

                                        }catch(Exception ex){ System.out.println(ex);}
                                }
                        }
                });
        }
        public static void main(String[] args)
        {
                new BankDelete();
        }
}
```

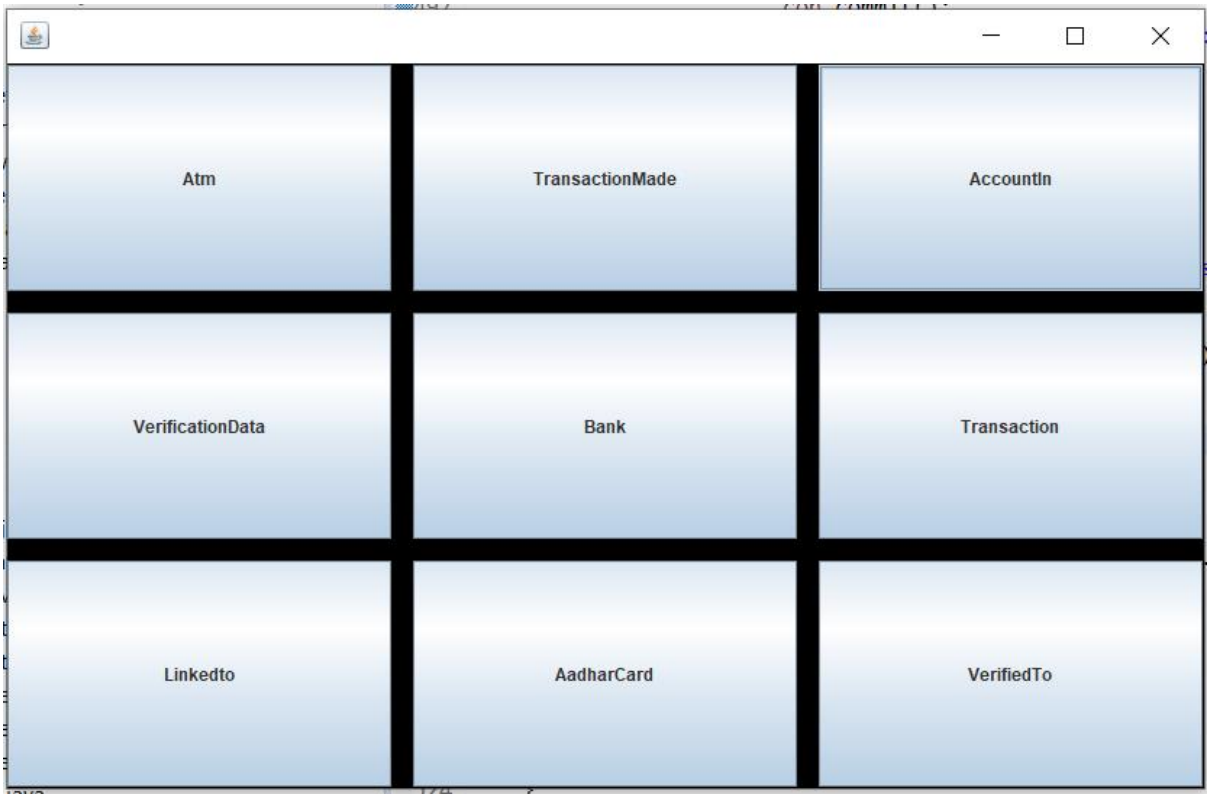
GITHUB LINK AND FOLDER STRUCTURE:

https://github.com/dyashovardhanreddy/MYCITYINFORMATION

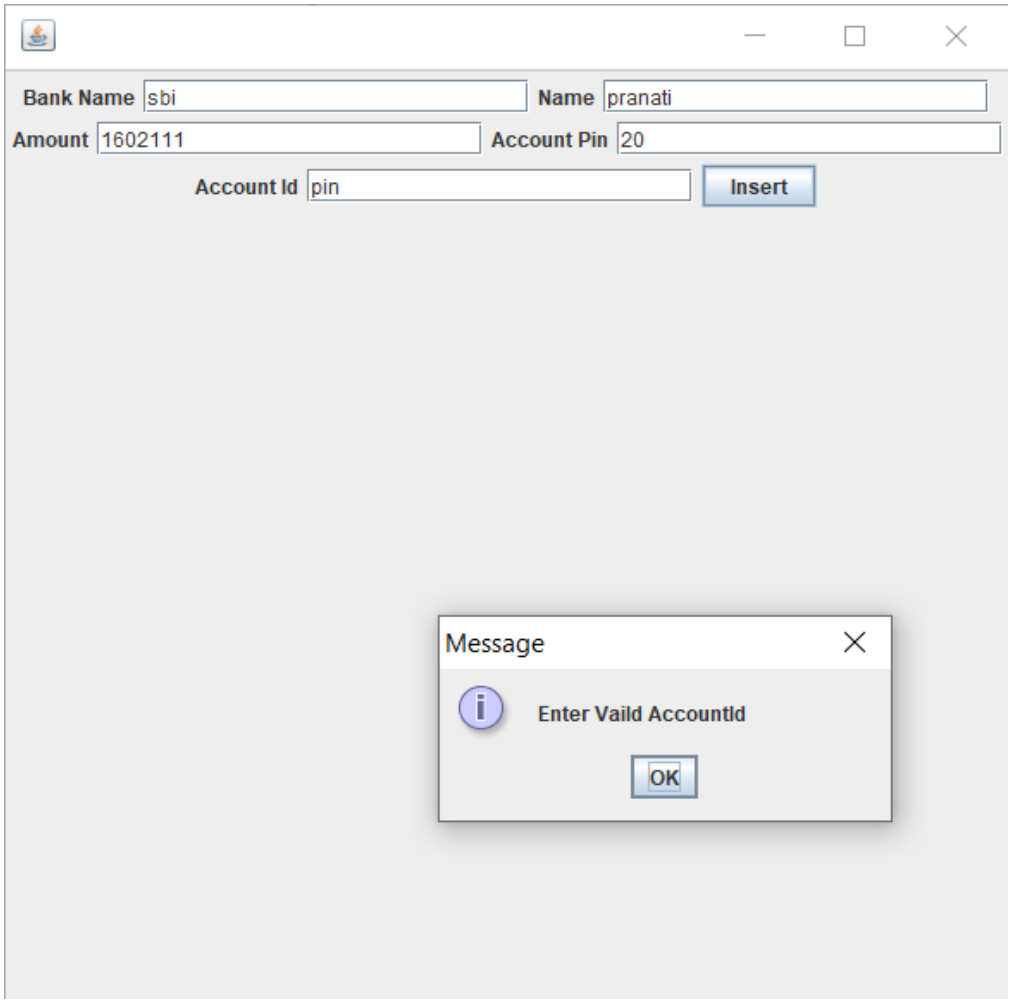


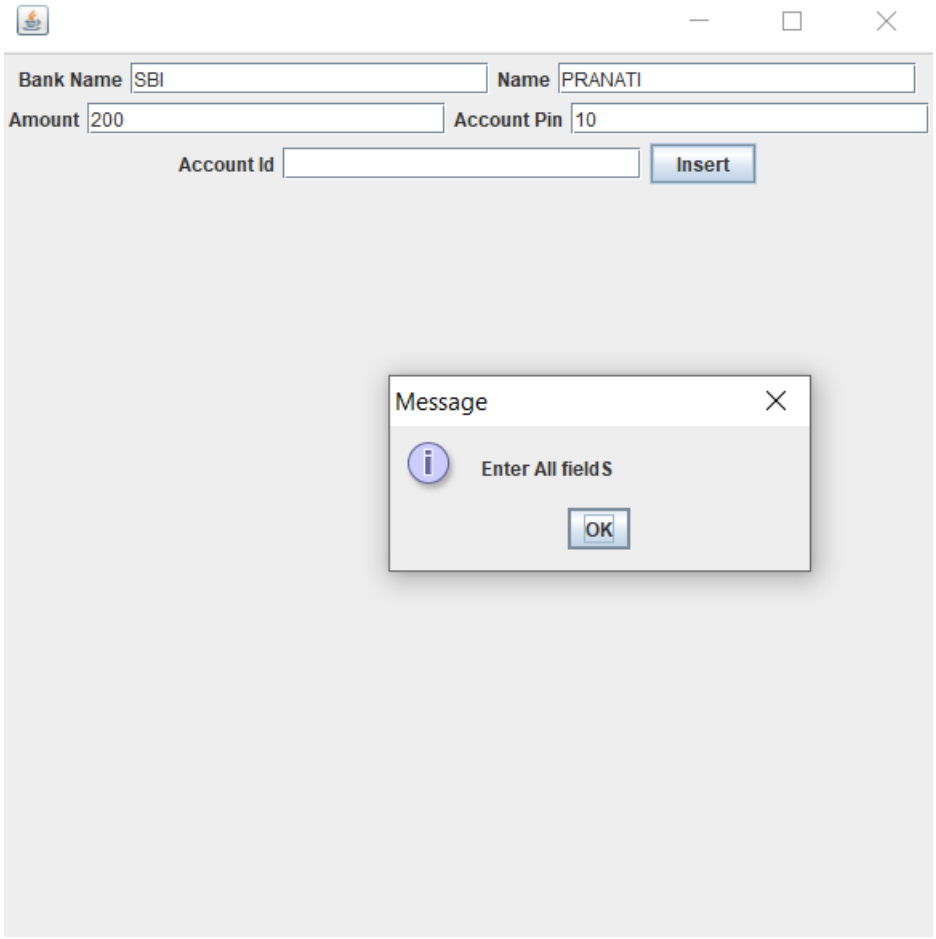
OUTPUT :

GUI For Main Frame:

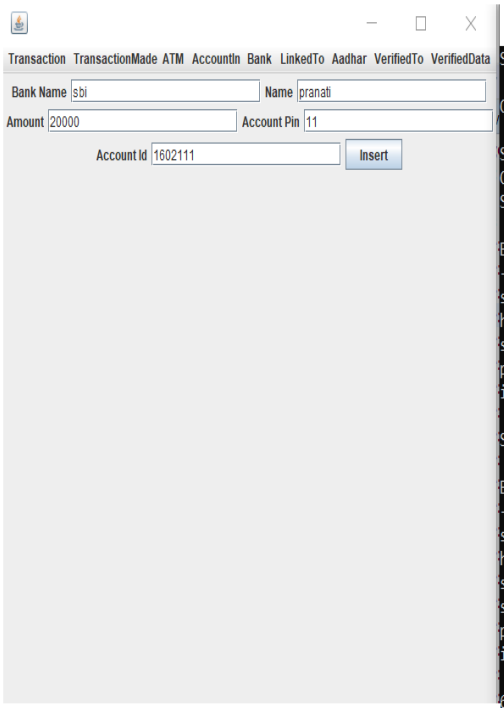


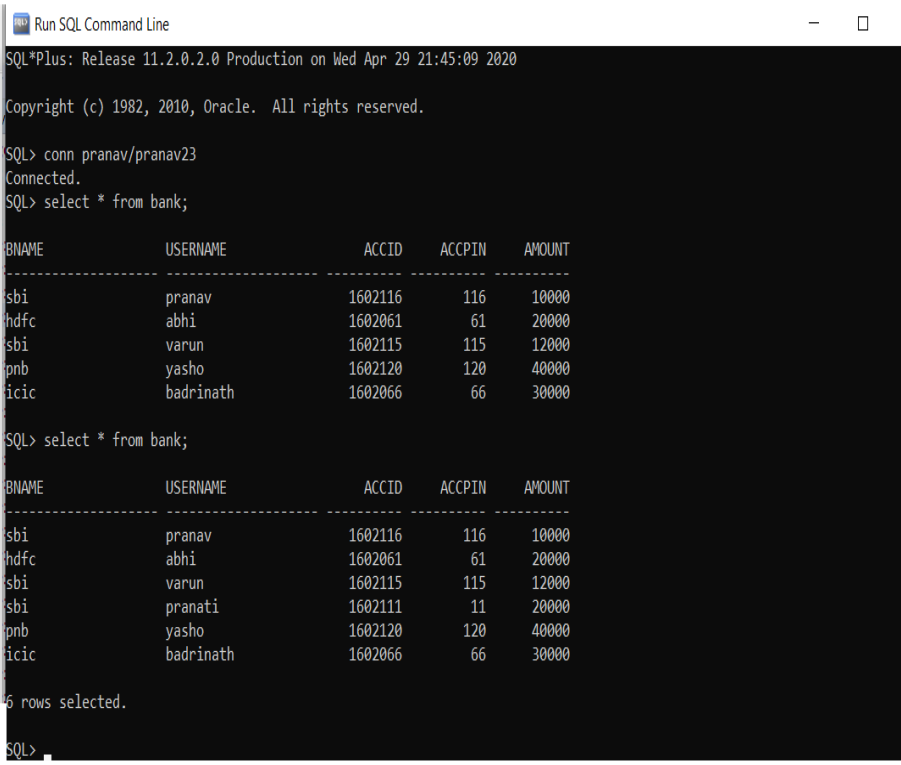
ERROR MESSAGES:



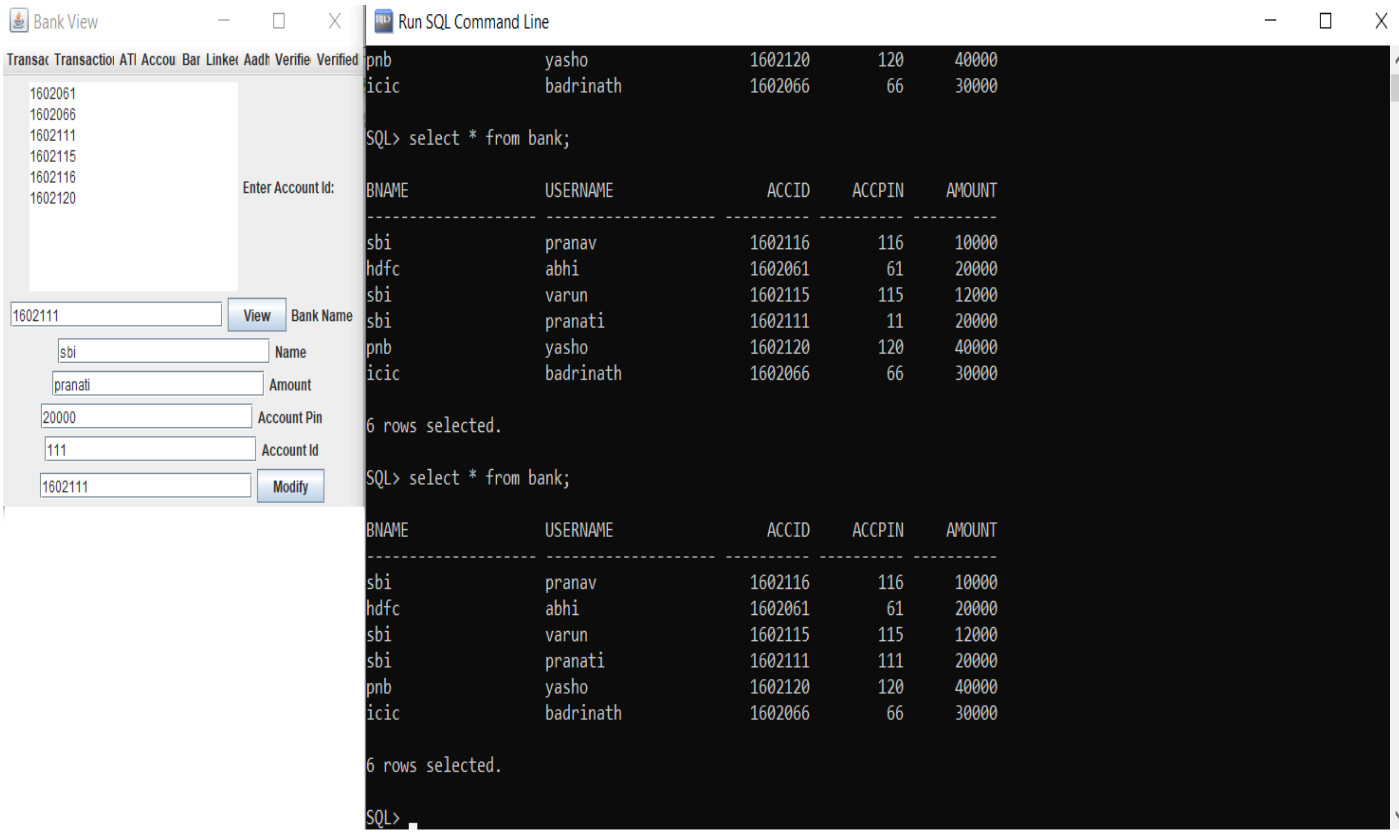

Bank Name
SBI
Name
PRANATI
Amount
200
Account Pin
10
Account Id
Insert
Message
Enter All fieldS
OK

Java GUI Insert in Bank:

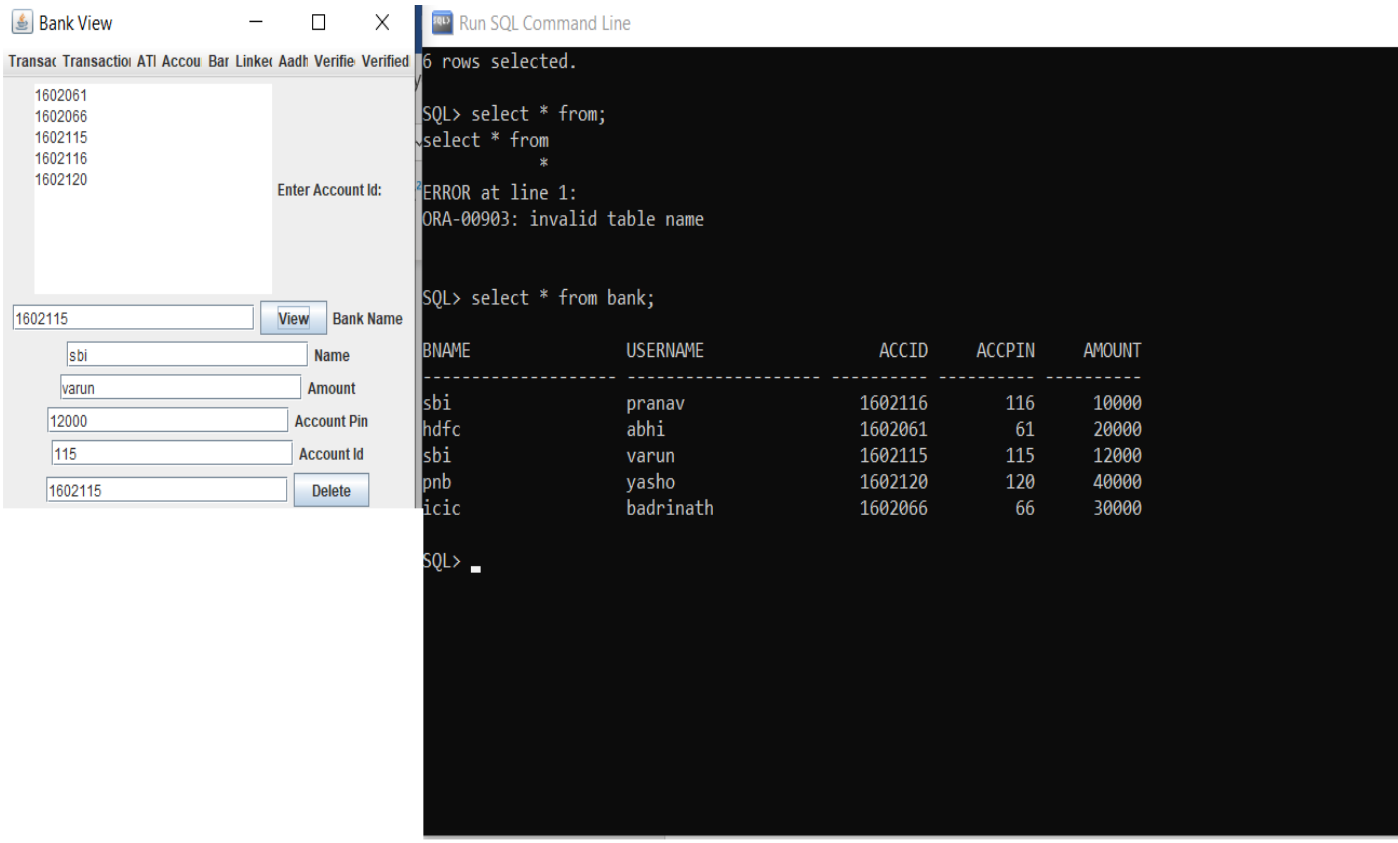




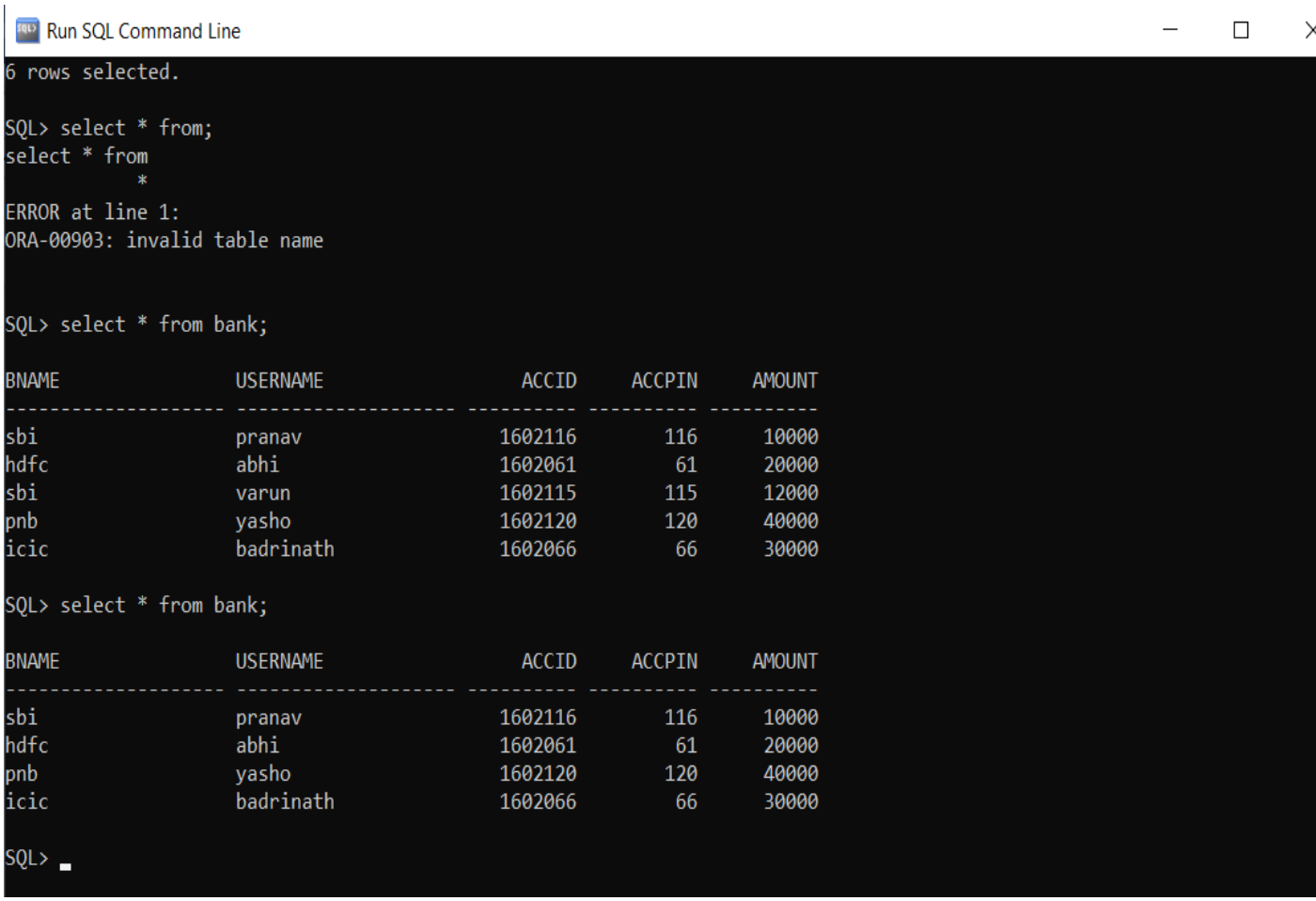
Update GUI for BANK Table:



GUI for Before Delete operation on BANK Table:



DataBase After Delete:



DISCUSSION AND FUTURE WORK!

This project tells us about we can access ATM by using our fingerprint by linking Aadhar card.

This make the more secured will using withdrawing or depositing money at ATM centres .

Future our government can plan these kind of projects to be implemented.

REFERENCES:

https://www.decodejava.com/what-is-jdbc.htm

https://docs.oracle.com/javase/8/docs/api/

https://www.tutorialspoint.com/swing/index.htm