CORE JAVA PROJECT

PROJECT TITLE: BANK MANAGEMENT SYSTEM

AIM:

- To achieve the Bank Accounting Process without any interruptions.

LANGUAGES:

- JAVA and SQL

SOFTWARE REQUIREMENTS:

- Eclipse for java.
- Mysql for sql.

SYNOPSIS:

In this BANK MANAGEMENT SYSTEM there 6 main operations are there.

That MAIN OPERATIONS are:

Admin Login --> Accounts can perform that operation.

New User Registrations --> User can perform that operation.

User Login --> User can perform that operation.

Deposite Money --> User can perform that operation.

Withdraw Money --> User can perform that operation.

Display Accounts Details --> Customer can perform that operation.

The control is given for both the admin and also user. Admin can perform two operations one is the fetching information about the passenger who all are reserved the seat and second one is admin can able the seat how many seats are reserved . In that Passenger side there is five main operations are given. The first one is registration operation it will make permanent account creation. Second one is login when ever you need the seat reservation for that security purpose this module will help.Third one is seat reservation this will take personal information's about that person , flight timing ,trip type, seat type,fare. Forth one is display process after the reservation if passenger need to be see the details about the reservation it will show the information about the seat reservation. Final one is seat cancellation this will also asking the security questions after that it will cancel and also it refund the ticket fare.

INITIAL SETUP:

(IN JAVA):

Mavan Project Name: BankManagementSystemProject.

Package Name:com.Bank Management_project.

Classes Name : 1. Main Operations.Java

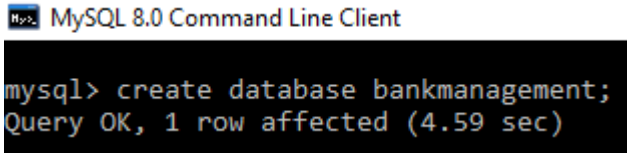
2.Bank Management.Java

3.Admin Operations.Java

4.Database Connection.Java

(IN DATABASE):

Creating database in sql (query)



Database Creation:

```
mysql> use bankmanagement;
Database changed
```

Tables Creation:

```
mysql> show tables;
+--------------------------+
| Tables_in_bankmanagement |
+--------------------------+
| bank_acc                 |
| user_acc                 |
+--------------------------+
2 rows in set (0.25 sec)
```

BANKMANAGEMENTMAIN:

ADMIN AND USER MAIN METHOD CODE:

```
/**
 ****************************CORE JAVA PROJECT*******************
 *                       CSR CAPGEMINI TRAINING PROJECT
 *                       EDUBRIDGE INDIA PRIVATE LIMITED
*PROJECT TITLE: BANK MANAGEMENT SYSTEM
 *               UNDER THE GUIDENCE OF TRAINER MRS.INDRAKA MALLI


                                              @DONE BY Shivani Gole
* In Bank Management SYSTEM:
 * MAIN OPERATIONS:
* 1)Admin Login -->  Accounts can perform that operation.
*  2) New User Registrations --> User  can perform that operation.
 *  3)User Login -->  User can perform that operation.
```

```
* 4) Deposite Money -->  User can perform that operation.
* 5) Withdraw Money --> User can perform that operation.
* 6) Display  Accounts Details --> Customer can perform that operation.
*/
* Main Operations class is having three major operations
*this will decides who is going to perform the operation
*1.admin Login
*2.New user registration
*3.User Login


case 1:
*If it is admin choice means it gives two choice for admin
*1.User Accounts-->it allows to create new  User registration for admin
*2.Total Accounts & Balance In Bank-->it allows to Display the Total Account
& Total Balance In Bank.
*
*case 2:
*2.New User Registration-->it allows to registration for New UserId for
Account
*3.User Login-->it allows to login the user account
*/
package com.BankManagementProject;

import java.sql.SQLException;

import java.util.Scanner;

public class MainOperations {

	public static void main(String[] args) throws SQLException {
		// TODO Auto-generated method stub


Scanner  sc = new Scanner(System.in);
```

```
                String adminname;
                String adminpass;
                int ch;
                while (true) {

                    System.out.println( "----------- Welcome to Bank Management
System---------- ");
                    System.out.println("1. Admin Login");

                    System.out.println("2. New User Registration");

                    System.out.println("3. User Login");

                    System.out.println("4. Exit");

                        System.out.print("Enter Your Choice:"); //user input
                        ch = sc.nextInt();


                        switch (ch) {

                        case 1://admin process

                                System.out.println("Your Choose AdminProcess");

                                System.out.println("Enter Admin name");

                                adminname=sc.next();

                                System.out.println("Enter Admin Password");

                                adminpass=sc.next();

                                if(adminname.equals("admin")&&

                               adminpass.equals("admin123")) {

System.out.println("-----------------Admin Screen-----------------------");

                    System.out.println("1. User Accounts");

                    System.out.println("2. Total Accounts & Balance In Bank");

                     System.out.println("3. Exit");

                     System.out.println("Enter your choice");

                                    int ch2=sc.nextInt();
                                    switch(ch2) {
```

```
                                    case 1:
System.out.println("------------------------User Accounts-----------------");
                    AdminOperation.adminDisplay();
                            break;
                            case 2:
 System.out.println("------------------------Total Accounts & Balance InBank-
-----------------------");
                                            AdminOperation.totalBal();
                                        break;
                                    case 3: //exit
                                         break;
                      default: System.out.println("Invalid choice");
                                    }
                                    break;
                                }
                               break;
                  case 2: //new user registration

System.out.println("------------------------New User Registeration--------");
                        BankManagement.userRegister();
                        break;
                        case 3:// user login
System.out.println("------------------------User Login--------------------");
                          BankManagement.loginUser();
                          break;
                        case 4: //exit
                          break;
                        }
```

```
System.out.println("Do you want to continue type y to continue or n to
terminate");

                        char ch1=sc.next().charAt(0);
                        if(ch1=='n'||ch1=='N')
                              break;



                    }
                       System.out.println("Your program is terminated");
               }

          }
```

DATABASE CONNECTION JAVA CLASS:

DATA BASE CODE:

```
/**

* Data base connection class-> it makes a connections between the spring tool
shoot ,eclipse and mysql

*

*         1.Driver->That implements the java databases connectivity (JDBC)API

*

*  2.url->data base management system jdbc driver uses to connect to a
database

*

*  3.username-> user name of the database

*

*  4.password->pass word for the databases

*

*  5.forname()-> method is loading the driver dynamically loads a java class
at runtime

*
```

```
*  6.DriverManger->Is that class making connection to database by passing
arguments as a url ,username and password.
*
*/


package com.BankManagementProject;

import java.sql.Connection;

import java.sql.DriverManager;

public class DatabaseConnection

{

static Connection con; // Global Connection Object

static String mysqlJDBCDriver = "com.mysql.cj.jdbc.Driver"; //jdbc driver

static String url = "jdbc:mysql://localhost:3306/bankmanagement"; //mysql url

        static String user = "root";        //mysql username

        static String pass = "root";  //mysql passcode

          public static Connection getConnection()

          {
              try {

                   Class.forName(mysqlJDBCDriver);

                  con = DriverManager.getConnection(url, user, pass);

              }
                        System.out.println("Connection Failed!");
```

```
            }


            return con;

        }

    }
```

NEW USER REGISTRATION PROCESSES:

NEW USER REGISTRATION CODE:

FOR USER:

1.This New User Registration also contain the user id username and password.

2.There is no option is given to create the new user registration process at front end.

NEW User Registration CODE:

```
/**
* New User registration
 *
* Registration Modules-> New User Registraion() ->It takes informations from User and saves in a database.
*
*   ->first it checks the registration is already done by the same mail id or not.
*    if it is not then ask further information regarding the registration...
*
*    ->User Id User name and password..
```

```
*/
//NEW USER REGISTRATION PROCESS


package com.BankManagementProject;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.Statement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.Scanner;

public class BankManagement {

	static Connection con=null;

	static PreparedStatement pst=null;

	static ResultSet rst=null;

	static int cid;

	static String username;

	static String password;

	static String accno;

	static double balance;

	static String accnocheck;

	static Scanner sc=new Scanner(System.in);


	  public static void userRegister() throws SQLException {
	con = DatabaseConnection.getConnection();

	String sel="select * from user_acc where cid=?";

	pst=con.prepareStatement(sel);

	System.out.println("Enter user id");
```

```
 cid=sc.nextInt();
 pst.setInt(1, cid);
 rst=pst.executeQuery();
 if(!rst.next()) {
   System.out.println("Enter Your UserName");
   username=sc.next();
   System.out.println("Enter your password");
   password=sc.next();
   System.out.println("Enter Account No");
   accno=sc.next();
while(true) {
  String ins="insert into user_acc values(?,?,?,?)";
  pst=con.prepareStatement(ins);
  pst.setInt(1, cid);
  pst.setString(2, username);
  pst.setString(3, password);
  pst.setString(4, accno);
  int i=pst.executeUpdate();
  if(i>0) {
  String in="insert into bank_acc values(?,?,?)";
        pst=con.prepareStatement(in);
        pst.setString(1, accno);
        pst.setInt(2, cid);
        pst.setDouble(3, balance);
        int j=pst.executeUpdate();
```

```
        if(j>0) {
              System.out.println("Registered Successfully");

              break;
        }
     }
                              // user login
                    System.out.println("-------------User Login--------------
");
                    BankManagement.loginUser();
                 break;
     }
      }else {

        System.out.println("User id is already registered");

      }

        }
```

Java output:

New User Registration output:

```
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:2
-----------------------New User Registeration-----------------------
Enter user id
8
Enter Your UserName
shivani
Enter your password
shiv123
Enter Account No
123456780
Registered Successfully
Do you want to continue type y to continue or n to terminate
```

LOGIN:

USER LOGIN CODE:

```
/*
* In this user login process the back end we created one admin name and password for the admin
*
* That admin name and pass word can be used to login admin login module
*
* If the login process get successful means admin can perform display operations
*
* 1.Deposite Money -> it gives information about Account Number,How much money want to Deposite
```

```
* 2.Withdraw Money -> it gives result about Account Number , How much money
want to Withdraw


* 3.Display Account Details -> it gives result about Account Number

*/


// USER LOGIN PROCESS FOR ADMIN
public static void loginUser() throws SQLException   {
	con=DatabaseConnection.getConnection();
	while(true) {
		System.out.println("enter user name");
		username=sc.next();
		System.out.println("enter password");
		password=sc.next();
		String sel1="select * from user_acc where cname=?";
		pst=con.prepareStatement(sel1);
		pst.setString(1, username);
		rst=pst.executeQuery();
		if(rst.next()) {
			String sel2="select * from user_acc where password=?";
			pst=con.prepareStatement(sel2);
			pst.setString(1, password);
			rst=pst.executeQuery();
			if(rst.next()) {
				System.out.println("Login Successful");
				while(true) {
			System.out.println("1. Deposite Money");
```

```
        System.out.println("2. Withdraw Money");
        System.out.println("3. Display Account details");
        System.out.println("4. Exit");
        System.out.println("Enter Your choice");
                    int ch=sc.nextInt();
                    switch(ch) {
case 1: System.out.println("Deposite Money In your Account");
                    System.out.println("Enter your account no");
                    accno=sc.next();
System.out.println("Enter how much money you want to deposite ");
                    balance =sc.nextDouble();
String sel="select * from bank_acc where accno=?";
                pst=con.prepareStatement(sel);
                pst.setString(1,accno);
                rst=pst.executeQuery();
                if(rst.next()) {
String dep="update bank_acc set balance=balance+? where accno=?";
                pst=con.prepareStatement(dep);
                pst.setDouble(1, balance);
                pst.setString(2, accno);
                int u=pst.executeUpdate();
                if(u>0) {
        System.out.println("Money Deposited Successfully");
                }
                }
```

```
                        break;
                        case 2:System.out.println("Withdraw Money");
                System.out.println("Enter your account number");
                        accno=sc.next();
            System.out.println("Enter how much money you want to withdraw");
                        balance=sc.nextDouble();
            String sel3="select * from bank_acc where accno=?";
                        pst=con.prepareStatement(sel3);
                       pst.setString(1,accno);
                       rst=pst.executeQuery();
                       if(rst.next()) {
    String dep1="update bank_acc set balance=balance-? where accno=?";
                       pst=con.prepareStatement(dep1);
                       pst.setDouble(1, balance);
                       pst.setString(2, accno);
                       int u=pst.executeUpdate();
                       if(u>0) {
            System.out.println("Money Withdraw Successfully");
```

```
                    break;

                }

                    }
                    break;

case 3:System.out.println("Display Account Details");

System.out.println("Enter your account number");

                    accno=sc.next();

String sel4="select * from bank_acc where accno=?";

                    pst=con.prepareStatement(sel4);

                    pst.setString(1,accno );

                    rst=pst.executeQuery();

                    while(rst.next()) {

System.out.println("Account No\t\tCustomer Id\t\tBalance");

System.out.println("----------------------------------------");

                        String ac=rst.getString(1);

                        int cid=rst.getInt(2);

                        double bal=rst.getDouble(3);
```

```
            System.out.println("----------------------------------------");
            System.out.println(ac+"\t\t"+cid+"\t\t\t"+bal);
                        }
                        break;

                        case 4://exit
                        break;
                    }break;
                }
            }
                    break;
             }else {
                    System.out.println("Invalid Username or password ");
                    break;
                // user login
System.out.println("--------------------User Login-----------------------");
```

```
                    BankManagement.loginUser();

                    break;

            }
        }}}
```

User Login java output:

```
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:3
------------------------User Login------------------------
enter user name
shivani
enter password
shiv123
Login Successful
1. Deposite Money
2. Withdraw Money
3. Display Account details
4. Exit
Enter Your choice
1
Deposite Money In your Account
Enter your account no
123456780
Enter how much money you want to deposite
50
Money Deposited Successfully
Do you want to continue type y to continue or n to terminate
y
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:3
------------------------User Login------------------------
enter user name
shivani
enter password
shiv123
Login Successful
```

```
1. Deposite Money
2. Withdraw Money
3. Display Account details
4. Exit
Enter Your choice
2
Withdraw Money
Enter your account number
123456780
Enter how much money you want to withdraw
23
Money Withdraw Successfully
Do you want to continue type y to continue or n to terminate
y
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:3
------------------------User Login------------------------
enter user name
shivani
enter password
shiv123
Login Successful
1. Deposite Money
2. Withdraw Money
3. Display Account details
4. Exit
```

```
Enter Your choice
3
Display Account Details
Enter your account number
123456780
Account No              Customer Id             Balance
--------------------------------------------------------------------------------
--------------------------------------------------------------------------------
123456780               8                       27.0
Do you want to continue type y to continue or n to terminate
```

ADMIN LOGIN CODE:

```
/*
* In this Admin login process the back end we created one user name and password for the user
*
* That user name and pass word can be used to login user login module
*
* If the login process get successful means user can perform operations
* operation are User Accounts, Total balance In Bank, Deposite Money, Withdraw Money, Display Account Details These are the operations are performed
*
* 1.User Accounts -> this module is used to created a new User Accounts in Bank*
* 2.Total Balance In Bank -> this module is used to canceling the reserved seat
*
* 3.Deposite Money ->
*
* 4.Withdraw Money ->
*
* 5.Display Account Details ->
*/
```

User Login java output:

```
package com.BankManagementProject;


import java.sql.Connection;
```

```
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.Scanner;

public class AdminOperation {
	static Connection con=null;
	static PreparedStatement pst=null;
	static ResultSet rst=null;

	static String accno;
	static Scanner sc=new Scanner(System.in);
	public static void adminDisplay() throws SQLException {
		con=DatabaseConnection.getConnection();

		String sel4="select * from bank_acc";
		pst=con.prepareStatement(sel4);

		rst=pst.executeQuery();
		System.out.println("Account No\t\tCustomer
Id\t\tBalance");
		System.out.println("----------------------------------------------
----------------------");
```

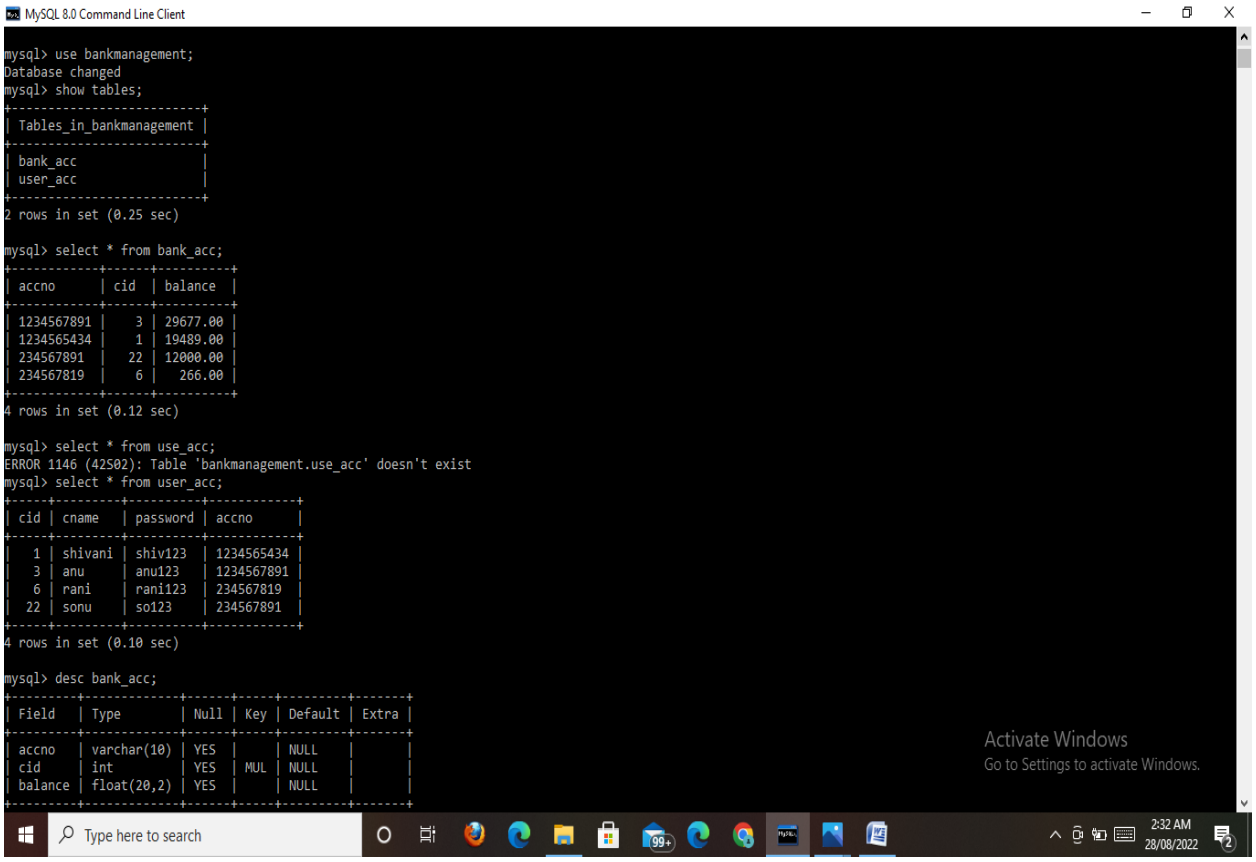
```
            while(rst.next()) {

                String ac=rst.getString(1);
                int cid=rst.getInt(2);
                double bal=rst.getDouble(3);
                System.out.println("----------------------------------------
------------------------------");
                System.out.println(ac+"\t\t"+cid+"\t\t\t"+bal);

            }

        }
        public static void totalBal() throws SQLException {
            con=DatabaseConnection.getConnection();

            String sel4="select count(*) from bank_acc";
            pst=con.prepareStatement(sel4);

            rst=pst.executeQuery();

            System.out.println("----------------------------------------------
----------------------");
            while(rst.next()) {
```

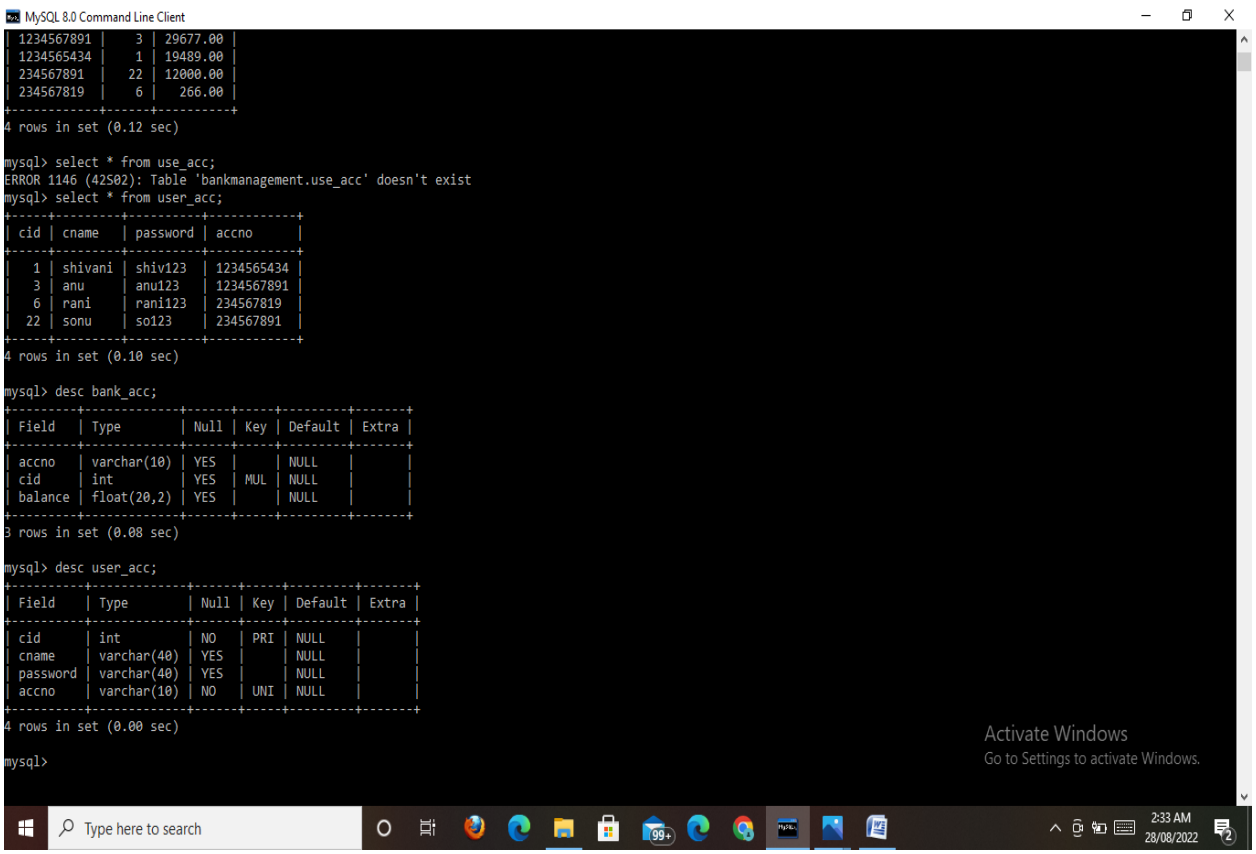
```
                System.out.println("Total Accounts in
Bank="+rst.getInt(1)+" ");


                }
                String sel="select sum(balance) from bank_acc";
        pst=con.prepareStatement(sel);


                rst=pst.executeQuery();


                System.out.println("----------------------------------------------------
----------------------");
                while(rst.next()) {
                        System.out.println("Total Balance in
Bank="+rst.getInt(1)+" ");


                }
}}
```

Java output:---

```
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:3
------------------------User Login------------------------
enter user name
shivani
enter password
shiv123
Login Successful
1. Deposite Money
2. Withdraw Money
3. Display Account details
4. Exit
Enter Your choice
1
Deposite Money In your Account
Enter your account no
123456780
Enter how much money you want to deposite
50
Money Deposited Successfully
Do you want to continue type y to continue or n to terminate
y
---------- Welcome to Bank Management System----------
1. Admin Login
2. New User Registration
3. User Login
4. Exit
Enter Your Choice:3
------------------------User Login------------------------
enter user name
shivani
enter password
shiv123
Login Successful
```

DATABASE RECORDS :---




MySQL 8.0 Command Line Client
1234567891	3	29677.00
1234565434	1	19489.00
234567891	22	12000.00
234567819	6	266.00
4 rows in set (0.12 sec)
mysql> select * from use_acc;
ERROR 1146 (42S02): Table 'bankmanagement.use_acc' doesn't exist
mysql> select * from user_acc;
cid	cname	password	accno
1	shivani	shiv123	1234565434
3	anu	anu123	1234567891
6	rani	rani123	234567819
22	sonu	so123	234567891
4 rows in set (0.10 sec)
mysql> desc bank_acc;
Field	Type	Null	Key	Default	Extra
accno	varchar(10)	YES		NULL	
cid	int	YES	MUL	NULL	
balance	float(20,2)	YES		NULL	
3 rows in set (0.08 sec)
mysql> desc user_acc;
Field	Type	Null	Key	Default	Extra
cid	int	NO	PRI	NULL	
cname	varchar(40)	YES		NULL	
password	varchar(40)	YES		NULL	
accno	varchar(10)	NO	UNI	NULL	
4 rows in set (0.00 sec)
mysql>
Activate Windows
Go to Settings to activate Windows.
Type here to search
2:33 AM
28/08/2022