**Lab Exercise 4**

**AIM: Bank Management System**

import java.util.\*;

class Account{

String name,acc\_type;

int Acc\_num,Acc\_Balance;

Account(){

}

Account(String n,int acc\_num,int b,String a\_t){

name=n;

Acc\_num=acc\_num;

Acc\_Balance=b;

acc\_type=a\_t;

}

}

class create\_account extends Account{

create\_account(String n,int acc\_num,int b,String a\_t){

name=n;

Acc\_num=acc\_num;

Acc\_Balance=b;

acc\_type=a\_t;

}

create\_account(){

super();

}

void insert(String n,int acc\_num,String a\_t){

name=n;

acc\_type=a\_t;

Acc\_num=acc\_num;

Acc\_Balance=0;

}

void display\_details(){

System.out.println("Depositor Name :" +name);

System.out.println("Account Number : "+Acc\_num);

System.out.println("Account Balance : "+Acc\_Balance);

System.out.println("Account Type : "+acc\_type);

}

void credit(int money){

Acc\_Balance=Acc\_Balance+money;

System.out.println("The current balance in your account is: "+Acc\_Balance);

}

void debit(int mon){

Acc\_Balance=Acc\_Balance-mon;

System.out.println("The current balance in your account is: "+Acc\_Balance);

}

}

public class MainServer {

public static void main(String args[]){

String user\_name=null,type;

type = null;

int balance=0,tmp=0;

int withd=0;

//generate Random Account Number

int aNumber = 0;

aNumber = (int)((Math.random() \* 9000)+1000);

create\_account user = new create\_account("user",0,0,"savings");

Scanner in = new Scanner(System.in);

Scanner strng=new Scanner(System.in);

int userChoice;

boolean quit = false;

do {

System.out.println("1. Create Account");

System.out.println("2. Deposit money");

System.out.println("3. Withdraw money");

System.out.println("4. Check balance");

System.out.println("5. Display Account Details");

System.out.println("0. to quit: \n");

System.out.print("Enter Your Choice : ");

userChoice = in.nextInt();

switch (userChoice) {

case 1:

System.out.print("Enter your Name : ");

user\_name=strng.nextLine();

System.out.print("Enter Account Type : ");

type=in.next();

user.insert(user\_name, aNumber, type); // inserted

System.out.println("\n\tYour Account Details\n\tDont Forget Account Number\n");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

user.display\_details();

break;

case 2:

System.out.print("Enter your account Number : ");

tmp=in.nextInt();

if(tmp==user.Acc\_num){

System.out.print("Enter Amount Of Money : ");

balance=in.nextInt();

user.credit(balance);

System.out.println("\t Successfully Deposited.");

}

else

System.out.println("Wrong Account Number.");

break;

case 3:

System.out.print("Enter your account Number : ");

tmp=in.nextInt();

if(tmp==user.Acc\_num){

if(user.Acc\_Balance==0)

System.out.print("Your Account is Empty.");

else{

System.out.print("Enter Amount Of Money : ");

withd=in.nextInt();

if(withd>user.Acc\_Balance){

System.out.print("Enter Valid Amount of Money : ");

withd=in.nextInt();

}

else

System.out.println("The Amount withdrawn is "+withd);

user.debit(withd);

}

}

else

System.out.println("Wrong Account Number.");

break;

case 4:

System.out.print("Enter your Account Number : ");

tmp=in.nextInt();

if(tmp==user.Acc\_num){

System.out.println("Your Current Balance : "+user.Acc\_Balance);

}

else

System.out.println("Wrong Account Number.");

break;

case 5:

System.out.print("Enter your Account Number :");

tmp=in.nextInt();

if(tmp==user.Acc\_num){

user.display\_details();

}else

System.out.println("Wrong Accoount Number.");

break;

case 0:

quit = true;

break;

default:

System.out.println("Wrong Choice.");

break;

}

System.out.println("\n");

} while (!quit);

System.out.println("Thanks !");

}}



