**Program:5**

import java.util.Scanner;

import java.lang.Math;

class account

{

String name=new String();

int accno;

double bal;

Scanner s=new Scanner(System.in);

void set()

{

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

name=s.nextLine();

System.out.println("Enter "+name+"'s account number");

accno=s.nextInt();

System.out.println("Enter balance amount ");

bal=s.nextDouble();

}

void display()

{

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

System.out.println("Your account number:"+accno);

System.out.println("Your Account Balance:"+bal);

}

account(){}

}

class savacct extends account

{

Scanner s=new Scanner(System.in);

savacct()

{

System.out.println("Cheque Facility not available ");

}

void deposit()

{

int ch;

double amt;

System.out.println("Press 1 to deposit ");

ch=s.nextInt();

if(ch==1)

{

System.out.println("Enter amount to be deposited ");

amt=s.nextDouble();

bal=bal+amt;

}

else

System.out.println("Invalid Input");

}

void in()

{

System.out.println("Enter rate of interest ");

double r=s.nextDouble();

System.out.println("Enter number of times interest applied per time period");

int n=s.nextInt();

System.out.println("Enter number of time periods");

int t=s.nextInt();

double x=bal\*(1+(r/n));

double ci=Math.pow(x,n\*t);

System.out.println("Interest amount="+ci+" \nBalance amount without interest is"+bal);

bal=bal+ci;

System.out.println("Available balance after updating is"+bal);

}

void wd()

{

System.out.println("Press 1 to withdraw ammount");

int ch=s.nextInt();

if(ch==1)

{

System.out.println("Enter the amount to be withdrawn ");

double wdraw=s.nextDouble();

bal=bal-wdraw;

System.out.println("Available Balance:"+bal);}

else System.out.println("Invalid input");

}

}

class curacct extends account

{

Scanner s=new Scanner(System.in);

curacct()

{

System.out.println("Cheque Facility available ");

}

void deposit()

{

int ch;

double amt;

System.out.println("Press 1 to deposit ");

ch=s.nextInt();

if(ch==1)

{

System.out.println("Enter amount to be deposited ");

amt=s.nextDouble();

bal=bal+amt;

}

else

System.out.println("Invalid Input");

}

void wd()

{

System.out.println("Press 1 to withdraw ammount");

int ch=s.nextInt();

if(ch==1)

{

System.out.println("Enter the amount to be withdrawn ");

double wdraw=s.nextDouble();

bal=bal-wdraw;

System.out.println("Available Balance:"+bal);}

else System.out.println("Invalid input");

if(bal<1000)

{

System.out.println("You are running out of minimum balance \nAmount of rs 50 has been credited as service charge for having low balance");

bal=bal-50;

System.out.println("Your Available Balance:"+bal);

}

}

}

public class Lab5

{

public static void main(String xx[])

{

Scanner s=new Scanner(System.in);

int ch;

System.out.println("\n\nPress\n1. if your account is savings account \n2. if your account is current account");

ch=s.nextInt();

switch(ch)

{

case 1:

savacct s1=new savacct();

s1.set();

s1.display();

s1.deposit();

s1.in();

s1.wd();

break;

case 2:

curacct c1=new curacct();

c1.set();

c1.display();

c1.deposit();

c1.wd();

break;

default : System.exit(0);

}

}



